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FIRE SERVICE  
EMERGENCY MANAGEMENT HANDBOOK

Final Report

for

Federal Emergency Management Agency, Washington, D.C. 20472

FEMA Award Number EMW-C-0743

FEMA Work Unit Number 6141A

January 1985



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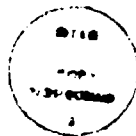
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community risk, concepts of emergency management, and specific steps in community risk reduction in the four phases of the emergency management process.

Sample forms, tables, and letters of agreement are also included.

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IAFC EXECUTIVE COMMITTEE

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From the Director of the Federal Emergency Management Agency (FEMA)

As the central point within the Federal Government for civilian emergency management activities in both peace and war, FEMA coordinates population protection, continuity of government and resource allocation aspects of national security emergencies, administers a range of national hazard-specific mitigation and preparedness programs, provides State and local emergency management guidance and support, and coordinates the Federal response to natural and manmade disasters.

In December 1982 FEMA adopted an Integrated Emergency Management System (IEMS) as a means of administering its programs and intergovernmental coordination responsibilities more effectively. The system structures all FEMA activities into a unified national process that applies common management functions to the degree of capability needed to manage any emergency condition that threaten public health and safety, irrespective of the nature or cause.

While Federal and State resources guide and support the building of emergency management capacity, it is at the local level where the action responsibility ultimately rests. In achieving functional emergency management capability, the role of the fire service is key because it possesses two essential elements:

- o a long tradition of commitment, responsibility, and community service--which, in recent years, has been enhanced by the increasing utilization of modern planning and management techniques; and
- o trained and dedicated professional personnel, ready and able to respond quickly and effectively, in times of disaster.

With this HANDBOOK, the International Association of Fire Chiefs has taken a major step in linking fire service emergency management planning to the overall national IEMS strategy.

The fire service makes a magnificent contribution to life safety in this country. We will continue to rely on the fire service for outstanding achievement and cooperation in community emergency management in the years to come.



Louis O. Gluffrida  
Director

# INTERNATIONAL ASSOCIATION OF FIRE CHIEFS • INCORPORATED

1329 18th STREET, N.W. • WASHINGTON, D.C. 20036



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Dear Colleague:

The fire service and the International Association of Fire Chiefs are keenly aware of both risks and responsibilities that accompany our leadership role in local comprehensive emergency management. We are proud of our record of service and are committed to providing the highest calibre of emergency management services to the citizens of our communities. But commitment is not enough; we need to take positive steps to safeguard and enhance our capability, and be prepared to face new challenges.

While our obligation to the public remains unchanged, other aspects of the world are changing. For instance, new and complex technology poses new threats; international politics remain unstable; fiscal realities at home are forcing us to examine closely our service delivery policies and procedures. The question is not whether we will continue to provide cost effective service, but rather how we will continue to do so.

We must constantly seek opportunities to build on the past, while preparing for the future. To maintain our ability to meet our community's fire protection and emergency management needs will require even greater attention to planning and close coordination with other community departments and agencies. The publication of this HANDBOOK reflects this perspective.

This HANDBOOK is an updated version of a previous emergency management publication, DISASTER PLANNING GUIDELINES FOR FIRE CHIEFS. Like the GUIDELINES, the HANDBOOK is a planning and resource document, not a how-to text. Your community and its emergency management situation is unique. The HANDBOOK presents planning principles and procedures which you can use in your own planning efforts, to reflect the needs and resources of your own locality.

As you may know, the IAFC has been heavily involved in the development of the Integrated Emergency Management System. With this HANDBOOK our members will be among the first local emergency management leaders to have at their disposal an important emergency planning and management tool which utilizes the IEMS concept and approach. This puts the fire service in the forefront of disaster management professionals in this country. As President of your professional association, I am pleased to have the opportunity to offer this product to you.

Chief Gerard A. Carle  
President, International Association of Fire Chiefs

## PREFACE

THE FIRE SERVICE EMERGENCY MANAGEMENT HANDBOOK is a planning guide for fire chiefs. Its purpose is to strengthen the EM planning capability of fire chiefs, particularly in relation to EM planning for the community as a whole. Among the subjects covered are the following:

- o Comprehensive Emergency Management (CEM) and the Integrated Emergency Management System (IEMS);
- o Attributes of an effective emergency management organization;
- o The emergency management planning process;
- o Highlights of special issues; and
- o Checklists for managing key emergency operations and dealing with specific hazards.

The HANDBOOK is both a successor and a companion volume to an earlier document published by the International Association of Fire Chiefs, DISASTER PLANNING GUIDELINES FOR FIRE CHIEFS. The two publications deal with the subject of emergency planning from slightly different perspectives. (For example, the historical involvement of the fire service in disaster preparedness; planning styles and elements of a community's disaster plan; detailed guidelines for preparing the fire department's disaster plan; and, detailed planning checklists for specific types of disasters.) This HANDBOOK approaches emergency management planning slightly differently. It discusses some basic planning and management principles, and presents an overview of a planning process in the context of CEM and IEMS -- the latter, a major program initiative of the Federal Emergency Management Agency.

Together, the GUIDELINES and the HANDBOOK, provide fire chiefs with complementary information and guidance in emergency management planning. For example, the HANDBOOK emphasizes principles of developing, evaluating, and revising plans, while the GUIDELINES discusses the mechanics of writing, maintaining, and reviewing a planning document. Many important aspects of emergency planning are covered in the GUIDELINES, and not in the HANDBOOK (and vice-versa). The reader is urged to use both documents when carrying out his or her own EM planning efforts.

## ACKNOWLEDGEMENTS

The Fire Service Emergency Management Handbook is based upon an earlier publication of the International Association of Fire Chiefs: Disaster Planning Guidelines for Fire Chiefs. That document, prepared in 1980 by Michael S. Hildebrand, was, like this one, produced under contract to the Federal Emergency Management Agency.

The handbook is the product of the cooperative efforts of many individuals and organizations. The guidance and recommendations of project task force members have played a central role in determining what revisions were required and what material ought to be added. They have, of course, reviewed the final report.

The Integrated Emergency Management System philosophy played a fundamental role in the preparation of this document. The Federal Emergency Management Agency has been instrumental in the development of IEMS, the strategy for encouraging comprehensive emergency management in localities across the country.

Chief Douglas R. Pollington, during his term as president of the IAFC, provided the counsel and support necessary to get the project under way. The leadership of Chief Gerald A. Carle, current president of the IAFC, has seen the project through to its completion.

Disaster Planning Guidelines for Fire Chiefs has been widely used since its publication. We are confident that the numerous comments and suggestions given us by concerned and interested members of the fire service will make this an equally useful document.



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EXECUTIVE COMMITTEE

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PART ONE: INTRODUCTION

## HOW TO USE THIS HANDBOOK

### Who Can Use This HANDBOOK

The purpose of this HANDBOOK is to assist Fire Chiefs in emergency management and disaster planning. As the successor to the IAFC's 1980 publication, DISASTER PLANNING GUIDELINES FOR FIRE CHIEFS, the HANDBOOK's major emphasis is on preparedness and the planning process; that is, with respect to emergency management, the HANDBOOK will help you to:

- o Evaluate where you are now;
- o Determine where you want to go; and
- o Provide some guidelines to help you get from where you are to where you want to be.

Virtually every fire chief has a major role in his or her community's emergency management structure -- in many cases, a leadership role. According to a 1979 IAFC survey,\* about 28% of Fire Chiefs are also their community's emergency preparedness directors, i.e., "the person who is primarily responsible to coordinate and lead in developing civil preparedness". The same survey found that when a jurisdiction's emergency preparedness director is a part-time position, that person's full-time position is in the fire department about one-third of the time.

Current state and federal strategies with respect to emergency management increasingly emphasize two points:

- o an all-hazard approach which emphasizes intra- and inter-governmental and community coordination; and
- o a growing awareness that responsibility for disaster management capability rests with the community as a whole, not merely with the fire service and other public safety departments.

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\*Results of this survey are summarized in the Appendix.

This means that whatever the precise nature of a Fire Chief's EM responsibilities -- and they differ from jurisdiction to jurisdiction -- it is increasingly important that Fire Department EM planning be supportive of, and coordinated with, overall community EM planning.

This HANDBOOK reflects that perspective; that is, the material is focused more on overall community EM management than on relatively specific fire service planning. However, most of the principles apply within the fire service as well. Thus, you can use the HANDBOOK in several ways; for example:

- o If you are the community EM director;
- o If your EM role and responsibilities vary according to type of disaster; and
- o To examine the EM program within the fire service.

#### The Emergency Management Context

Since GUIDELINES was first published, EM has become an increasingly sophisticated field. In particular, two important concepts have been refined and articulated:

- o Comprehensive Emergency Management (CEM); and
- o Integrated Emergency Management System (IEMS).

CEM and IEMS represent major steps in:

- o Understanding the dynamics of emergency management;
- o Identifying some requirements for effective EM; and
- o Improving the overall capability of federal, state, and local government to conduct an effective and coordinated EM program.

Both concepts define ideas which are unique to disasters and emergency situations\* and also employ generally-accepted principles of planning and management. This HANDBOOK is written mainly in the context of the CEM and IEMS concepts; these concepts are discussed in more detail in Part One, Section 2.

#### How to Use the HANDBOOK

The fact that each community has a unique pattern of emergency management needs and resources means that there is no single EM plan or organizational structure which will be universally applicable to all localities. Thus, this HANDBOOK does not present an emergency management plan. Instead, it describes a planning process -- an approach to EM problem solving which includes suggestions and analytical techniques that many communities have found useful in their planning efforts.

As you work through the material, you should consider the information in relation to your own community, thinking in terms of how those ideas will contribute to improving the effectiveness of your own EM program. In many cases, questions and exercises are provided. These are not intended to be all inclusive, but rather to get you started and to stimulate your own ideas on the subjects discussed. Do not feel limited by the contents, either in terms of the topics covered, the format, or the amount of space provided. Develop your own questions, exercises, and lists; photocopy the pages and blank forms; and use as much additional paper as necessary. The HANDBOOK is a skeleton around which you can build your own emergency management program.

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\* The terms "disaster", "hazard", "emergency situation", "crisis" are used more or less interchangeably. Also, EM often is used to abbreviate "emergency management".

While in many ways the HANDBOOK is a stand-alone document, you will derive maximum benefit if, before you begin Part Two, Section 3.2, "The Planning Process", you obtain the following FEMA IEMS documents:

- o PROCESS OVERVIEW, (CPG 1-100, September, 1983)
- o HAZARDS ANALYSIS FOR EMERGENCY MANAGEMENT, (CPG 1-101, September 1983)
- o CAPABILITY ASSESSMENT AND STANDARDS, (CPG 1-102, November, 1983)
- o MULTI-YEAR DEVELOPMENT PLANNING, (CPG 1-103, January, 1984)

These documents contain the details of EM analytical procedures which are recommended and summarized in this HANDBOOK. Another useful resource is the URBAN GUIDE FOR FIRE PREVENTION AND CONTROL MASTER PLANNING, which presents a step-by-step planning method, along with sample forms you can use to help in your own detailed planning.

Finally, space limitations dictate that the HANDBOOK only touch on most of the subjects covered. A great deal of excellent material exists on a wide variety of aspects of emergency management. Readers are urged to use the sources of additional information and reference lists, provided in the appendix to pursue subjects of particular interest and to follow up on topics in more depth.



## Summary

### WHAT THIS HANDBOOK IS NOT/DOES NOT

A "cookbook" to direct an EM operation.

Present an EM plan which can be lifted, as is, for your locality.

Provide in-depth discussion of EM topics.

Provide all the answers.

The last word in EM planning and organization.

### WHAT THIS HANDBOOK IS/DOES

A set of planning and management guidelines for effective EM.

Describe a planning approach which you can utilize in your own community.

Highlight some planning and EM concepts.

Provide some suggestions and ideas intended to stimulate your own ideas.

A starting point for EM planning and organization.

## INTRODUCTION

### 1. YOU ARE AT RISK

#### 1.1 What's a Disaster?

In many ways, local governments are always prepared to expect the unexpected. By establishing and maintaining fire and police departments, governing bodies acknowledge that the provision of emergency public safety services to the inhabitants of the community is a normal and routine responsibility of the jurisdiction. Sometimes, a community is confronted by an emergency situation which cannot be managed through normal means using the routine procedures and resources of the responsible local department(s) -- that kind of situation, for purposes of this HANDBOOK, is considered to be a disaster. Thus, a disaster is an unforeseen, unplanned event that exceeds the normal day-to-day capabilities of local government.

Disasters can be natural, such as earthquakes or hurricanes, or man-made in cause. The latter category covers a very wide range of hazards. Included in this category are such threats as hazardous materials spills, civil disorders, energy or power shortages, major fires, contaminated water supplies, radiological incidents, and enemy attack. Moreover, disasters of the same type will differ widely in severity, depending on such factors as degree of warning and duration and scope of impact. Thus, there is no such thing as a typical disaster. Virtually every community in the country is potentially vulnerable to some sort of serious emergency situation.

#### 1.2 You Are At Risk

Emergency management, as an area of local government emphasis, carries with it a real irony. Although the potential for a disaster exists everywhere and the cost in suffering, life, and property can be devastatingly high, citizen apathy with respect to emergency preparedness is common. Under normal conditions, citizens -- and the governments which serve them -- do not place a high priority on developing or participating in emergency management programs. However, at the same time, citizens also expect their local government leaders to effectively manage a disaster should one occur in their community.

Emergency management can be said to be effective if, "when applied during a disaster, it provides the levels of protection for life and property, and recovery assistance which are acceptable to the citizens of the community."\* To accomplish this, the governing body needs to know what these acceptable levels of service are. Unfortunately, in most cases, the citizens cannot tell you -- that is, until after the disaster has occurred. At that point, they can, and will, tell you what is NOT acceptable.

Citizens hold their government leaders accountable for providing emergency services when needed; that is, while the public may rarely specifically articulate expectations about disaster service-levels -- in advance of the emergency situation -- they have those expectations, nevertheless. Generally speaking, citizens expect the following from their local government:

- o To provide information on alerting signals, action to take, etc., in advance of the disaster;
- o To quickly and accurately assess the magnitude of the emergency and to keep the public informed throughout the incident;
- o To provide for the rapid restoration of services even when those services are not the direct responsibility of the local government, e.g., private utilities;
- o To provide for (or access to) recovery services, such as family unification, insurance claim preparation, tax counseling, etc.; and
- o To provide information on, and specific action steps toward, mitigating the impact of future emergencies.

Unfortunately, in too many cases, local governments are unprepared to meet these needs. Emergency planning is often inadequate or non-existent; what plans that do exist are frequently out-of-date or irrelevant to the real threats the community faces. Training and simulation exercises, particularly at the multi-jurisdictional and inter-governmental levels,

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\* ICMA, "Local Government Disaster Protection, Final Technical Report", February, 1981.

rarely take place. What it comes down to is that all too often, emergency management and governmental leaders are unprepared to meet their responsibilities to their communities.

The consequences of failure can be serious. In addition to the obvious health and safety effects, communities that experience disasters frequently pay a high price in other ways: social disruption, negative economic impact, and psychological after-effects are not unusual post-disaster phenomena. Moreover, ineffective disaster management can jeopardize the political and personal lives of public officials. Local municipal and emergency officials who give inadequate attention to the ability of their community to respond effectively in an emergency are politically and legally vulnerable. Increasingly, they are being held personally and professionally liable for the quality of the public protection they provide. It is not an exaggeration to say that with respect to potential disasters and the establishment of programs to effectively deal with these disasters, communities, and their emergency management leaders, are all at considerable risk.

## 2. DISASTER MANAGEMENT: TWO CONCEPTS

### 2.1 Overview

During the 1970's, it became apparent that the nation badly needed a comprehensive and coordinated approach to emergency management. Hazards had become increasingly technologically complex, and resources to deal with these hazards were uncoordinated and fragmented among a large number of agencies. Moreover, federal aid requirements for state and local governments were generally tied to a civil defense attack focus, an approach which tended to ignore, and was often in conflict with, other kinds of emergency management planning. The creation of the U.S. Fire Administration in 1974 was an attempt to coordinate resources and expertise and to develop improved planning and management strategies with respect to fire protection; the establishment of FEMA in 1979 expanded this approach to disaster management across the board.

Also, in the late 1970's, the Defense Civil Preparedness Agency (now a part of FEMA) supported a major study of emergency management at state and local levels which was conducted by the National Governors' Association. Among its accomplishments, the study:

- o called for a comprehensive EM policy and organizational structure at the Federal level; the NGA project worked closely with the Federal reorganization project which created FEMA; and
- o articulated the concept of Comprehensive Emergency Management (CEM), including describing, and more fully developing, principles concerning the nature and relationships of four phases of disaster management.

The above events have greatly influenced the nation's emergency management environment. CEM has been widely accepted as a useful emergency management framework. FEMA is well established and has developed a planning and management strategy called the Integrated Emergency Management System (IEMS). As a fire chief concerned with your community's emergency management capability, CEM and IEMS are concepts with which you need to be

familiar. They dominate the context in which your own EM planning will be carried out and constitute the organizational structure for "The Emergency Management Process", Part Two of the HANDBOOK. Each is described below.

## 2.2 Comprehensive Emergency Management (CEM)

Comprehensive Emergency Management is a concept which recognizes that emergency-related activities occur in four separate, but related, phases. The phases are related to the disaster by time and function, and utilize different personnel skills and management orientation. A fundamental principle of CEM is that emergency management is a partnership among the different levels of government and private agencies to deal with the full range of natural and man-made hazards throughout all four phases. The chart on the following page defines and describes these CEM phases:

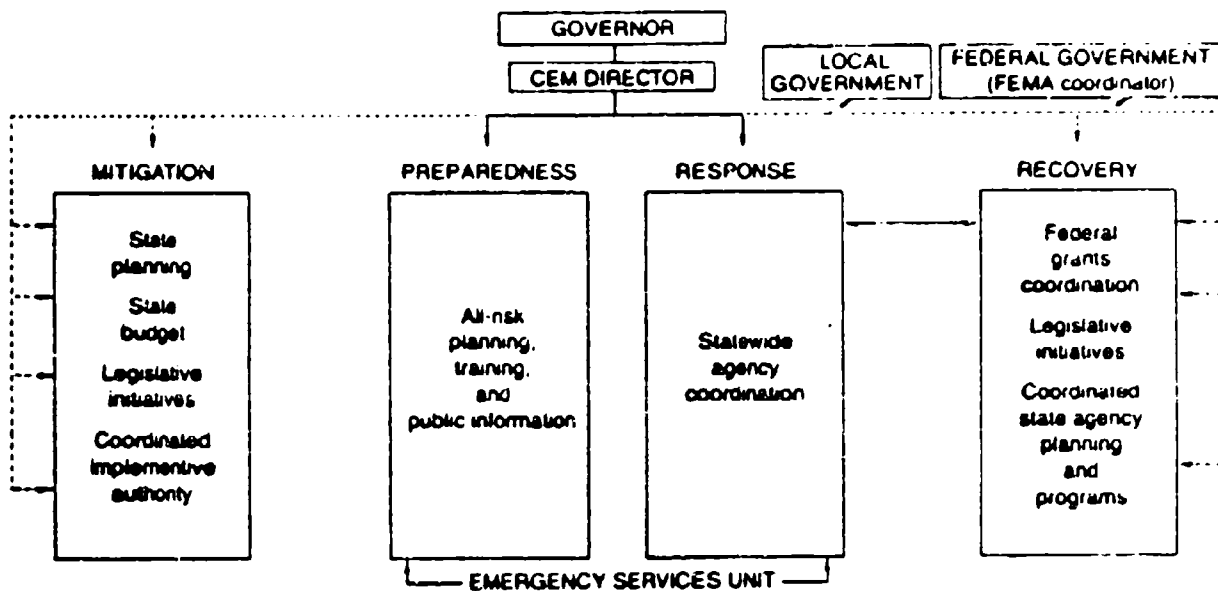
# 1. FOUR PHASES OF CEM ACTIVITIES

PHASE	PERSONNEL ORIENTATION AND SKILLS	EXAMPLES OF ACTIVITIES
<p><u>Preparedness:</u> Actions which enhance capability to effectively respond to an emergency situation.</p>	<p>Authoritative, operational decision-making orientation. Systems, planning, training and technical skills.</p>	<ul style="list-style-type: none"> <li>o developing emergency preparedness plans, and testing these plans</li> <li>o inventorying local resources</li> <li>o initiating emergency management contacts (individuals, State/Federal programs, private or public organizations).</li> <li>o training in emergency preparedness procedures</li> </ul>
<p><u>Mitigation:</u> Actions which can prevent, alleviate, or diminish the potential effects of a disaster situation.</p>	<p>Political acumen. Analytic, evaluative, policy-making skills.</p>	<ul style="list-style-type: none"> <li>o building code enforcement</li> <li>o zoning and land use management</li> <li>o earthquake resistant construction</li> <li>o public information/education</li> </ul>
<p><u>Response:</u> Actions which provide assistance to the injured, reduce the probability of secondary damage, and speed recovery operations.</p>	<p>Same as preparedness.</p>	<ul style="list-style-type: none"> <li>o alerting the public</li> <li>o mobilization of emergency personnel and equipment</li> <li>o evacuation of residents</li> <li>o search and rescue operations</li> </ul>
<p><u>Recovery:</u> Actions to restore the community to pre-emergency conditions. Short-term: returns vital life support systems to minimum operating standards; Long-term: returns community to pre-disaster or new, improved conditions.</p>	<p>Program knowledge, awareness of resources, planning and coordination skills.</p>	<ul style="list-style-type: none"> <li>o loans/grants/insurance programs</li> <li>o long-term medical assistance, e.g., psychiatric counseling</li> <li>o reconstruction/rehabilitation</li> <li>o public information/education</li> <li>o adoption of hazard reduction programs</li> </ul>

An important aspect of CEM is the pivotal role played by state government in all disaster management phases. The diagram below depicts the functional and management relationships among local, state, and federal levels of government.

## 2. SUGGESTED LINKAGES FOR COMPREHENSIVE EMERGENCY MANAGEMENT

(coordinating all risks, four phases, with state development plan)



Note: This is a functional linkage diagram. It is not an organizational chart or model.



### 2.3 The Integrated Emergency Management System

Like CEM, the Integrated Emergency Management System emphasizes intergovernmental coordination and a systematic approach to improving the effectiveness of disaster management. IEMS is a 13-step process that will help state and local governments accomplish three tasks:

- o Determine their hazards and magnitude of risk in a logical and consistent manner;
- o Assess their existing and required capability with respect to those hazards; and
- o Establish realistic plans and proposed actions to close the gap between existing and required levels of capability.

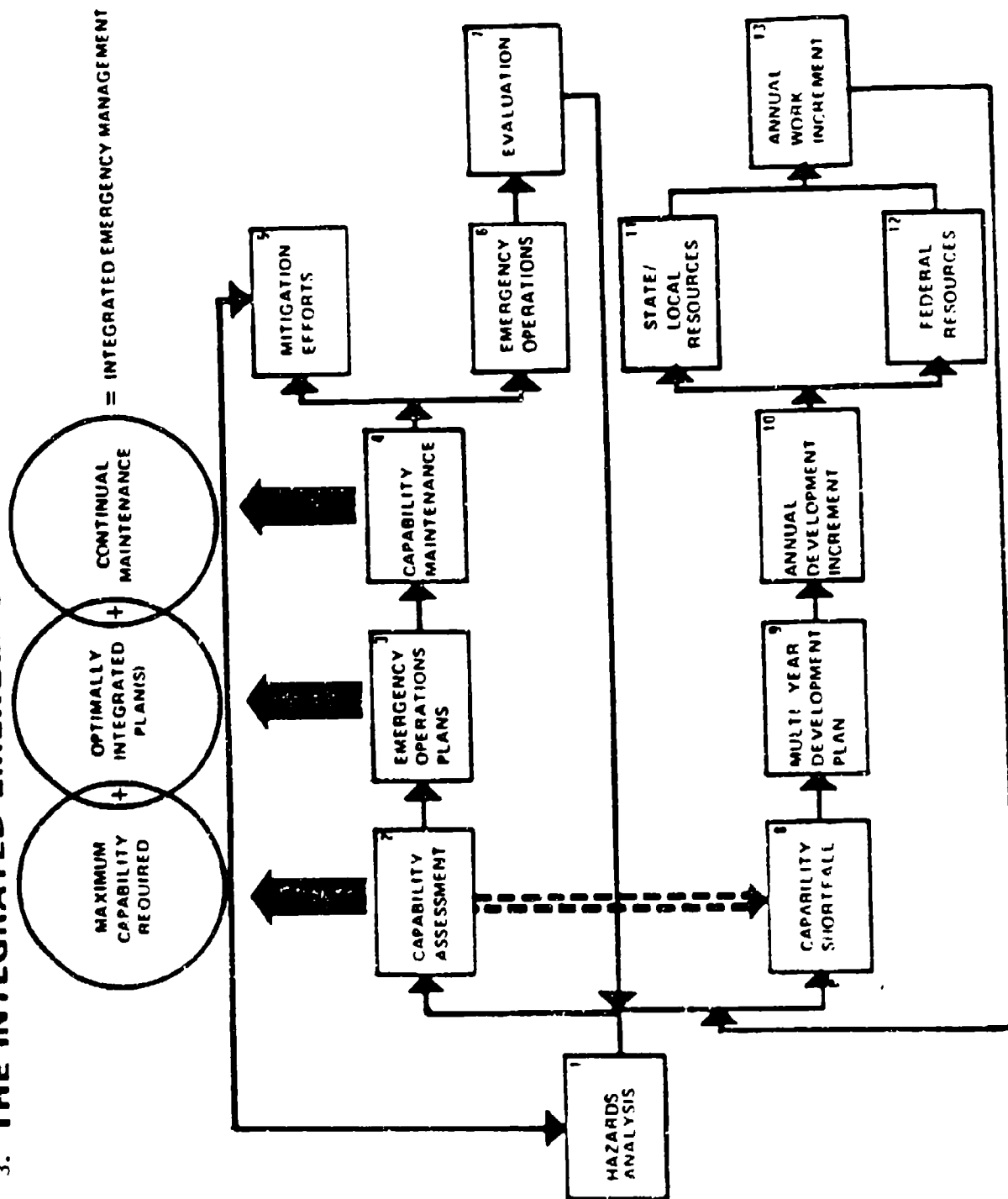
IEMS approaches emergency management more from the perspective of performing EM functions than in terms of responding to specific hazards; that is, IEMS encourages integrating EM activities along functional lines, across all hazards, at all levels of government.

The IEMS process not only acknowledges, but uses as a fundamental assumption, the fact that communities greatly differ with respect to both the hazards they face and the capability they possess to handle these hazards. Thus, it is recognized that the level of effort to perform each IEMS step will differ from place to place. IEMS also recognizes that the steps in the process must be compatible with the community's existing plans and resources. Thus, the process assumes two paths:

- o Steps 1-7, which focus on current capability and activities, and
- o Steps 8-13, which emphasize capability improvement.

The steps are listed below. A more complete description of IEMS is found in the FEMA IEMS series publication, PROCESS OVERVIEW.

### 3. THE INTEGRATED EMERGENCY MANAGEMENT SYSTEM



- Step 1. Hazards Analysis: Identifying potential hazards and determining the probable impact those hazards could have on people and property.
- Step 2. Capability Assessment: Assessing current capability for dealing with hazards identified above.
- Step 3. Emergency Operations Plans: Developing plans with functional annexes common to the hazards identified above.
- Step 4. Capability Maintenance: Maintaining the ability to take appropriate and effective action against any hazard.
- Step 5. Mitigation Efforts: Taking steps to minimize the potential effects of hazards.
- Step 6. Emergency Operations: Being able to conduct emergency operations at any time, regardless of plans for improving capability in the future.
- Step 7. Evaluation: Assessing the outcome of emergency operations and assessing the results in terms of actual vs. required capability.
- Step 8. Capability Shortfall: Determining the difference between current and optimum capability.
- Step 9. Multi-Year Development Plan: Preparing a long term (ideally 5-year) plan to reach the desired level of capability.
- Step 10. Annual Development Increment: Based on the multi-year plan, determining in detail what is to be done next year.
- Step 11. State/Local Resources: Identifying the resources (financial and in-kind) that state and local governments can contribute to capability development and maintenance.
- Step 12. Federal Resources: Continuing provision, by the federal government, of financial, technical, and other kinds of support.
- Step 13. Annual Work Increment: Reducing the capability shortfall and modifying corresponding plans based on the capability improvement.

PART TWO: THE EMERGENCY MANAGEMENT PROCESS

### 3. PREPAREDNESS

#### 3.1. GETTING ORGANIZED

##### 3.1.1 Overview

Just as there is no such thing as a typical emergency, there is no single emergency management organizational structure which is ideal for every community. However, the CEM and IEMS concepts do recognize that disasters have common phases, and that a systematic EM approach is best for dealing with these phases. Similarly, there are some organizational principles which promote more effective EM and do apply, more or less, across the board. These principles relate to the functional ability of the EM organization, rather than to the way that structure is formally depicted on an organizational chart.

Emergency organizational arrangements differ among communities for a variety of reasons. One important factor is the variety of ways in which local governments are legally and functionally established. For example:

- o The balance of authority among city, county, regional, and state governments differs from state to state;
- o Local forms of government differ (e.g., council-manager, mayor-council, commissioner);
- o State government legal instruments may specify certain communication channels in disasters (e.g., through the highest elected official);
- o EM responsibility may be specified by charter or special ordinance;
- o Localities differ in the ways in which they provide fire protection, law enforcement, EMS, and disaster management services, (e.g., through separate departments, through a single public safety department, through contracts).

These in-place arrangements provide built-in limitations, with respect to a community's EM organizational flexibility.

Communities differ in other ways: geographical size and characteristics; size, density, and make-up of population; economic and fiscal resources; etc. Additional factors include the personalities of, and interpersonal relationships among, municipal and private sector leaders; community customs and traditions; and the degree of concern and prevailing attitudes about emergency management readiness.

Although communities and their EM organizations differ, there are three functions (or positions), that are key to effective local emergency management:

- o The Director of Emergency Management - the person legally responsible to the governmental entity for emergency management, provides overall policy and direction;
- o The EM Coordinator, or Planner - the person generally responsible for overall community disaster planning and coordination; and
- o The Incident Commander - the person who actually directs the disaster operation, i.e., who has the authority and responsibility to direct local government resources during a disaster situation. In some cases, the "incident commander" can really be two persons; one at the field command post, and one at central EOC.

In some places, these positions are filled by different individuals; in others, the same person may perform more than one function.

As Fire Chief, you are guaranteed to have a major role in your locality's emergency management structure. Whether you fill one or more of the above positions, formally or informally, your influence and informed leadership are essential to the effectiveness of emergency management in your community. While there is no one organizational pattern that is best for all areas, there are some principles -- organizational attributes -- that tend to enhance EM organizational effectiveness; that is, communities with EM organizations that have certain characteristics tend to perform the above three functions more effectively.

As an emergency management leader, you will find it useful to understand these principles:

- o as a framework to examine and assess your community's EM organizational structure;
- o in suggesting ways to modify or strengthen that structure; and
- o for planning and operations within the Fire Department

There are 14 EM organizational attributes in four general categories. These attributes are summarized on the following page. The remainder of this section discusses these attributes.

Figure 4.

ATTRIBUTES OF AN EFFECTIVE EM ORGANIZATION

Roles and Responsibilities

- A. Roles of Elected Officials Defined
- B. Strong and Definitive Lines of Command
- C. Good Interpersonal Relations
- D. EM Structure and Procedures as Close to Routine as Possible
- E. Procedures to Alert Key Municipal Officials and Community Leaders
- F. Multiple Use of Resources

Hazard and Planning Approach

- G. All Hazard Approach
- H. EM Planning an Ongoing Activity

Public Involvement/Relations With the Community

- I. Maximum Ability to Alert the Public
- J. Public Information Function Clearly Defined
- K. Public-Private Cooperation and Coordination

Intergovernmental

- L. Active Intergovernmental Coordination
- M. Eligibility for State and Federal Subsidies Considered
- N. Ability to Maintain Comprehensive Records



### 3.1.2. EM ROLES AND RESPONSIBILITIES

#### A. ROLES OF ELECTED OFFICIALS DEFINED

It is best if the roles of elected government officials are specifically defined in the emergency management organizational structure. These officials will, of course, have key roles in representing their respective constituencies during the emergency situation; they should also be expected to participate in emergency planning, such as in the Goal Setting process described in Section 3.2.3. In addition, elected officials may be assigned specific functions during a disaster operation. Such emergency assignments should be clearly represented within the organizational structure.

Roles and responsibilities may be official and unofficial:

- o Examples of official responsibilities include overall authority for emergency management; authority to officially declare a disaster on behalf of the jurisdiction; responsibility for formally requesting federal, state, and/or county assistance.
- o Examples of unofficial responsibilities include policy development; liaison with news media; liaison with constituencies.

As fire chief, your influence over role assignments may be limited. But, you will still find it helpful, in advance of a disaster, to know what these roles are likely to be -- i.e., what you should expect from your elected officials during a large-scale emergency situation. The following exercises will help to clarify that information.

(NOTE: If roles and responsibilities vary according to the type of emergency, you may need to photocopy these blank forms and complete the exercises separately for each hazard).

1. Identify the person responsible for alerting each official concerning a potential disaster; also identify the person responsible for keeping him/her informed throughout the emergency.

<u>Elected Position</u>	<u>Person Responsible for Alerting</u>	<u>Person Responsible for Subsequent Information</u>

2. Identify the official and unofficial roles and responsibilities of the elected officials in your community.

<u>Elected Position</u>	<u>Emergency Management Official Responsibilities</u>	<u>Unofficial Responsibilities</u>

### Analyzing the Results

Review the results of the above steps and determine:

- o Which officials have unspecified or ambiguous roles? Are there any responsibilities, currently not assigned, which one or more of these individuals might handle?
- o What changes are necessary to ensure that officials will be alerted and kept informed on a timely basis throughout an emergency situation?

### Keep in Mind That:

- o Roles and responsibilities of elected officials should be consistent with their political objectives and needs, e.g., dealing with public information, dealing with officials in other jurisdictions, etc.
- o Elected officials are likely to be highly concerned with emergency management, especially because of the potential political impact of a disaster. If their interest is not high, consider taking steps to educate and motivate them, particularly about the ways in which they are "at risk".
- o Officials should be encouraged to review community emergency management plans and structure on a biennial basis, at least.

### B. STRONG AND DEFINITIVE LINES OF COMMAND

The emergency management organizational structure should clearly delineate lines of authority and responsibility for all phases of an emergency situation. In such a situation, a number of governmental

agencies may be involved. To avoid confusion, or even tragic consequences, the command structure should be very clear throughout all aspects of a disaster operation:

- o Planning and preparation;
- o Monitoring and alerting;
- o Operations; and
- o Recovery.

Furthermore, all personnel should know and understand the established lines of command, and how they fit in.

Lines of authority may be official and/or unofficial; responsibility may be delegated formally and/or defacto. As Fire Chief, your role in the various phases may be lead or support. Or, your role may vary, according to the type of emergency which exists. In any case, it is important for you, and all members of your department, to know and to understand how the chain of command operates, and the relationship between the Fire Service and other public and private agencies. The following exercises will help you to accomplish this.

1. List the official emergency management responsibilities of the Fire Chief, i.e., as specified in the municipal charter, ordinance, etc. (You may have to check with the city attorney to answer this question).

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2. List the unofficial emergency management responsibilities of the Fire Chief.

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3. When a disaster occurs, who is the official "Incident Commander", i.e., commander-in-chief, or tactical on-scene commander, -- the person with the authority to direct municipal resources?

A. It does not vary by type of disaster; it is always the:

<input type="checkbox"/> Chief Administrative Officer (CAO)	<input type="checkbox"/> Fire Chief
<input type="checkbox"/> Assistant CAO	<input type="checkbox"/> Police Chief
<input type="checkbox"/> Emergency Director	<input type="checkbox"/> Other (specify)
	_____

B. ☐ It varies by type of emergency.

(SKIP TO QUESTION 6)

C. ☐ The incident commander is not designated.

4. When a disaster occurs, does the person checked in A., above, delegate his/her responsibility to someone else, either officially or defacto?

☐ YES      ☐ NO

IF YES: To whom is that responsibility delegated?

Person(s)	Position(s)

A) Indicate who is responsible for key EM functions:

B) Draw an organizational chart of your community's emergency management organization, showing only key positions and main lines of authority.

[illegible]

6. For each applicable hazard listed below, identify the official Incident Commander in COLUMN A. If that responsibility is delegated (either officially or defacto), identify to whom, in COLUMN B.

	(COLUMN A) INCIDENT COMMANDER	(COLUMN B) RESPONSIBILITY DELEGATED TO?
Flood/Water Emerg.	_____	_____
Tornado	_____	_____
Hurricane	_____	_____
Earthquake	_____	_____
Drought	_____	_____
Blizzard/Winter Storm	_____	_____
Trans. Accident	_____	_____
Hazardous Materials Accident	_____	_____
Civil Disturbance	_____	_____
Conflagration	_____	_____
Mass evacuation (Enemy Attack/ Nuclear Incident)	_____	_____
Other:	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

7. Does the EM Director and/or Incident Commander have written authority to direct resources of other units of government?

YES \_\_\_ NO \_\_\_

IF YES: Identify the units of government, and the circumstances and conditions under which this authority may be exercised.

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### Analyzing the Results

Examine your answers to the questions and the lists you prepared.

- o Do you know and thoroughly understand the chain of command and EM organization?

- o Indicate your level of confidence in that chain:

Very High	High	Adequate	Low	Very Low
___	___	___	___	___

- o Are there any EM functions for which the responsible position is not clear or is less than adequate? Are there other weaknesses in the EM organization?
- o What are some potential solutions or changes you would like to see? How might you go about trying to make these changes? Are any of them solely within your control to effect?



- o List below those personnel who may be appropriate for new or modified EM assignments:

<u>NAME</u>	<u>CURRENT POSITION</u>	<u>POTENTIAL EM ASSIGNMENT</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Keep in Mind That:

- o Emergency management command personnel should be very strong, knowledgeable leaders who have the respect of other key municipal officials.
- o Interpersonal relationships are important in any organizational structure (See Section C).
- o Resistance to change can be minimized if certain principles are understood and utilized. (See HANDBOOK Chapter 7, "Managing Change")

### C. GOOD INTERPERSONAL RELATIONS

As in any other organization, the effectiveness of your emergency management structure is strongly influenced by personalities and interpersonal, and interdepartmental, relationships. Moreover, these relationships are neither permanent nor stable; they change as individuals are assigned into, and out of, the organization. This is one reason that there is no such thing as a model organizational structure which is applicable to all communities.

It is important to take interpersonal relationships and individuality into account when establishing and/or evaluating an EM organization. Some personnel may have good leadership potential, but are currently under-utilized. Others may have the respect of, or special connections with, officials in other agencies or departments, which could be leveraged for EM purposes. In still other cases, traditional interdepartmental rivalries may interfere with utilizing personnel in certain ways; often, this is more a result of not knowing one another than actual hostility between individuals. The following exercises will help you to examine your EM organization from an interpersonal and interdepartmental perspective.

1. Refer to the previous section, Question 5A. For each person listed, answer the following questions: (you may want to photocopy the list or use a separate sheet of paper).

A) Using the following scale, rank the quality of the working relationship between yourself and each person on the list:

1 - Poor    2 - Fair    3 - Adequate    4 - Good    5 - Excellent

- B) With which agencies and departments does the Fire Department have the best working relationship? With which does it have the worst?

Best Relationships

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Worst Relationships

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Keep in Mind That:

- o Stress virtually always strains relationships. If personnel do not get along well on a routine basis, they may not work together well in a crisis.

- o Interpersonal relationships can often be improved by more frequent personal contact. Think about ways to accomplish this -- for example, transmit information personally rather than via interoffice mail.
- o Training exercises can be used to improve interpersonal relationships within a department and between departments.

#### D. EMERGENCY MANAGEMENT STRUCTURE AND PROCEDURES SHOULD BE AS CLOSE TO ROUTINE AS POSSIBLE

Under stress, people tend to revert to first learned behavior. Therefore, the organizational structure, which applies to emergency situations, should be as similar as possible to that which is used for day-to-day operations.

As much as possible, the emergency structure should be an extension of the routine. Of course, special functions may be added, (e.g., damage assessment), and it may be necessary to coordinate with more agencies than usual. But, to the extent possible, personnel should continue to work with the supervisor and associates according to normal authority patterns.

In some places, the responsibility for managing an emergency shifts according to the type of disaster. For example, the Fire Chief would be in charge for conflagrations and hazardous materials spills; the Police Chief for civil disturbances; and the Public Works Director might direct operations during a power failure or blizzard. In these cases, personnel from non-command departments may be required to play a support role and follow directions from persons with whom they do not ordinarily work, or whom they might not even know.

Disaster simulations are effective ways to practice and help to "routinize" emergency procedures. But you need not rely on simulations alone. Think about other ways to help people get to know each other and work together in advance of a crisis; for example, for intra-city charity drives, on large-scale disaster public information campaigns, through municipally-sponsored sports and recreation activities.

To help determine how close your routine and disaster procedures are, complete the following exercise.

1. List major functions which are common to both routine and disaster situations. (For example, fire suppression, crowd control, debris removal.) Then, for each function, identify the agency/department (public or private) with day-to-day responsibility and with responsibility during a major emergency.

<u>Function</u>	<u>Agency/Dept with Day-To-Day Responsibility</u>	<u>Agency/Dept with Responsibility During a Disaster</u>

2. Fire Department Procedures: On the following chart, compare the routine organization with the disaster organization.

<u>Function</u>	<u>Routine Person in Charge</u>	<u>Person in Charge During a Disaster</u>

### Analyzing the Results:

1. Circle those functions for which the agency with routine responsibility differs from the one with responsibility during a disaster. How well do you and your staff know your counterparts in those other agencies? Consider ways to expand contacts with these other agencies.
2. Compare the routine versus disaster organization within the Fire Department.
  - o Circle the functions for which they differ. Do these structures have to be different?
  - o Do personnel generally have the same working relationships in a disaster as they do on a day-to-day basis, i.e.; scope of authority, lines of supervision, etc.?
3. List below the changes you might make either in routine or disaster personnel assignments and/or procedures to make them more consistent.

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### Keep in Mind That:

- o Using similar structure and procedures could:
  - Reduce errors
  - Reduce training requirements
  - Reduce the amount of resources needed to perform a function

- o It is often useful to involve personnel who will be performing disaster functions in the development of plans and procedures for those functions.

#### E. PROCEDURES TO ALERT MUNICIPAL OFFICIALS AND COMMUNITY LEADERS

The emergency management organization should clearly provide for the alerting of municipal officials, key staff, and leaders of community agencies in time of disaster. These persons include at least the following: elected officials, the CAO, municipal public safety and emergency management personnel, and key members of the community such as the media, hospitals, suppliers of special emergency equipment. These individuals should be able to be reached 24 hours a day, whether or not the public telephone system is operational.

Roles and responsibilities regarding who notifies whom should be clearly spelled out. There should be back-up procedures to deal with contingencies, such as when persons are away or incapacitated. You should seek to avoid the situation in which important members of the EM organization learn of the disaster situation from a commercial radio news broadcast.

Use the following exercises to describe how the key emergency personnel in your community would find out about a disaster situation.

1. A) Does anybody in the Fire Department have the specific responsibility of informing you that a disaster situation may be developing?

Yes \_\_\_\_ No \_\_\_\_

IF YES: Who? \_\_\_\_\_

IF NO: How would you be likely to find out that an emergency situation might be developing?

\_\_\_\_\_  
\_\_\_\_\_

2. A) List below persons in other departments and agencies whom you expect to let you know about a developing emergency.

<u>Department/Agency</u>	<u>Responsible Party</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- B) If you were away or incapacitated, would the above individuals know whom to notify?

Yes \_\_\_\_ No \_\_\_\_

3. Who in the Fire Department is responsible for notifying persons in other agencies/departments?

<u>Fire Department Personnel</u>	<u>Agency &amp; Person to Notify</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

### Analyzing the Results

1. Review the lists above. Determine whether there are any gaps in the internal notification network.
2. Are there back-ups to the system, both in terms of personnel and procedures?

Keep in Mind That:

- o It may be advantageous to expand the number of persons who have pagers or other radio devices for alerting purposes.
- o Testing your system regularly may heighten the awareness of senior officials about local emergency management.

F. MULTIPLE USE OF EM PERSONNEL AND RESOURCES

The EM organizational structure should promote the use of personnel and other resources in circumstances other than emergencies and disasters. Among the benefits of this policy are the following:

- o Duplicate facilities and personnel "down time" are expensive: multi-use of both is a cost-effective management strategy;
- o Opportunities are provided for EM personnel to get to know persons in other departments and agencies, thus potentially improving interpersonal relations;
- o Using EM resources on a day-to-day basis could increase the EM awareness of all personnel;
- o Personnel will become familiar with EM equipment, thus reducing confusion when needed in an emergency;
- o Facilities and equipment may be maintained better if used on a routine basis.

To see how well you are making multiple use of Fire Department personnel and resources, complete the following lists. If you can, and where applicable, also answer the questions for the community EM structure as a whole.



1. List Fire Department (and EM personnel) and identify any additional functions they perform.

<u>Name (or Position)</u>	<u>Non-Emergency Management Activity</u>	<u>None</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

2. Identify major types of emergency management equipment and facilities, and indicate their non-emergency uses.

<u>Facilities/Equipment</u>	<u>Non-Disaster Use</u>	<u>Not Used</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

### Analyzing-the-Results

If EM resources are under-utilized for non-EM purposes, try to identify potential uses. Your staff and persons in other departments and agencies might have some new ideas.

#### Keep In Mind That:

- o EM training resources could be used for general governmental employee CPR training.
- o The EOC could be used for day-to-day or supplementary operations of departments which have communications and/or dispatch functions.

### 3.1.3. HAZARD AND PLANNING APPROACH

#### G. ALL HAZARD APPROACH TO PREPAREDNESS AND MITIGATION

Your emergency management organizational structure and corresponding plans should be designed to handle the disasters which are most likely to occur in your community. This all hazard EM capability is so important to effective emergency management that FEMA has published, as part of the IEMS series, a guidance document entitled, Hazards Analysis for Emergency Management. You should obtain this Guidance as soon as possible. Hazards analysis is also summarized in Section 3.2.2.A of this HANDBOOK.

An all hazard approach should deal with all four phases of a disaster situation; i.e., preparedness, mitigation, response, and recovery. Many EM functions are similar for different kinds of emergencies; e.g., providing food and shelter. An all hazard approach identifies these functions, but also takes into account the differences that must result depending on the kind of emergency that is at hand. For example, churches and schools located along a river might be appropriate as designated shelters for victims of a fire or a winter fuel emergency, but not for a flood.

Two areas in which an all hazard awareness is particularly important are in disaster mitigation and ongoing monitoring. The best organizational structures foster community capability in both respects.

Mitigation activities can occur both in advance of, and following, a disaster situation. For example, the municipality can seek to minimize hazardous materials spills, and/or the corresponding consequences, by instituting strictly-enforced controls on such transport within city limits. Similarly, planning and zoning regulations can forbid new development in a flood plain. The period following a disaster is often an opportune time for mitigation actions, while the consequences of the emergency experience are fresh in the public mind. For instance, after a conflagration, it might be easier to institute building code requirements for fire-resistant materials in the rebuilding of the damaged properties, as well as for new construction.

Another important organizational capability is the provision of EM monitoring on a 24-hour basis. It should be possible to monitor the development of any potential disaster situation around the clock, in order to be able to alert EM personnel and the general public as needed and appropriate. This capability is crucial to establishing an accurate and complete understanding of both the nature and magnitude of an emergency. Furthermore, public awareness that this capability exists may help to reduce apathy and attract stronger citizen participation in, and support for, community emergency management as a whole.

As mentioned above, hazards analysis is a major EM planning activity for which FEMA has prepared some specialized materials; thus, hazards analysis procedures are not included in this section. The following questions are intended to give you a sense of your community's mitigation focus and organizational structure with respect to ongoing monitoring.

1. Examine the following list of potential disasters (or use the results of a previously-performed hazards analysis). For each hazard listed, rate the adequacy of the mitigation activities being implemented in your community. Use the following scale:

5 - Excellent	2 - Fair
4 - Good	1 - Poor or non-existent
3 - Adequate	NA - Not applicable in this locality

- ☐ Flood/Water Emergency
- ☐ Tornado
- ☐ Hurricane
- ☐ Earthquake
- ☐ Drought
- ☐ Blizzard/Winter Storm
- ☐ Transportation Accident
- ☐ Hazardous Materials Accident
- ☐ Civil Disturbance
- ☐ Conflagration
- ☐ Mass Evacuation (Enemy Attack/Nuclear Incident)
- ☐ Other: \_\_\_\_\_
- ☐ \_\_\_\_\_

2. Describe how hazards are monitored in your community in terms of:

WHAT - Check each hazard currently monitored.

WHO - Indicate the person/agency/department responsible for monitoring that hazard.

HOW - The general procedure for gathering, recording and reporting information concerning extent/magnitude and location of a developing or actual disaster. For example, National Weather Service monitor, direct line to utility, etc.

	<u>WHO</u>	<u>HOW</u>
<input type="checkbox"/> Flood/Water Emergency	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Tornado	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Hurricane	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Earthquake	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Drought	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Blizzard/Winter Storm	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Transportation Accident	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Hazardous Materials	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Accident	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Contaminated Water	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Supply	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Civil Disturbance	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Conflagration	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Mass Evacuation (Enemy	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Attack/Nuclear Incid.)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Analyzing the Results

- o Review the hazards mitigation list. In order of descending priority, list the five hazards most in need of improved mitigation.

1. _____	4. _____
2. _____	5. _____
3. _____	

- o Review the monitoring list. Consider ways to monitor those hazards which are currently not being monitored. For those with blanks in the WHO and/or HOW columns, obtain the information and write it on the list.

### Keep in Mind That:

- o In the event of a disaster, the municipality and its officials may be liable if the EM plan does not cover known hazards.
- o Disaster mitigation actions are sometimes unpopular (e.g., codes preventing wood shingled roofs, density limitations on building and development).
- o State and federal regulations sometimes require certain mitigation actions.
- o Bus drivers, public works employees, and other personnel with radio-equipped vehicles could be trained and used as observers.
- o Some monitoring could be done, either cooperatively or under contract, by a neighboring community.
- o Your municipality might not be aware that neighboring localities depend on you for certain kinds of monitoring.

#### H. EM PLANNING AN ONGOING ACTIVITY

In the best case, the local government organization should establish an emergency management planning function in such a way that it:

- o has the status and authority to obtain the attention, cooperation, and respect of other government personnel; and,
- o is integrated into the routine operations of the government and community agencies.

Too often, emergency management planning is conducted in relative isolation, and is the responsibility of a staff person with little visibility or actual authority. Much EM planning is accomplished on a part-time basis, with too few resources of any type dedicated to the activity. In these circumstances, EM planning is considered to be the responsibility of only the department in which the function is carried out; few other persons or departments either know or think much about it.

Effective community emergency management requires municipal and community participation in the planning process on an ongoing basis. Section 3.2 of this HANDBOOK discusses some ways in which this kind of planning can be accomplished -- the setting of community goals, objectives and EM priorities; evaluating progress; and why, in fact, planning is a continual process, and not a onetime event. To be successful, those in charge of these efforts should have frequent contact with other departments and agencies, and should have the leadership skills, resources and competence to command their respect.

To begin to determine the level and effectiveness of EM planning in your community, answer the following questions.

1. Is there a person with designated responsibility for emergency planning in your community?

YES ☐ NO ☐

(IF NO, SKIP TO QUESTION 3)

2. For the person in Question 1, what is his/her name:

Name & Title \_\_\_\_\_

Department \_\_\_\_\_

Authorities and responsibilities:

<u>Authorities</u>	<u>Responsibilities</u>

3. Identify and list Fire Department personnel assigned to EM planning.

<u>Name</u>	<u>Approximate Number of Person-Hours</u> (If not Full Time)



### Analyzing the Results

- o Does the EM planner in Question 1 have the authority to implement decisions?

YES \_\_\_ NO \_\_\_

Does he/she report to someone with that authority?

YES \_\_\_ NO \_\_\_

IF YES, WHO? \_\_\_\_\_

- o How frequently does he/she work with other departments and community groups for EM planning?

\_\_\_ Daily \_\_\_ Infrequently

\_\_\_ Weekly \_\_\_ Never

\_\_\_ Monthly

- o Are these contacts encouraged, welcomed, and returned?

YES \_\_\_ NO \_\_\_

- o What additional Fire Department resources (e.g., personnel, equipment, facilities, contract money) would you like to devote to EM planning? How would they be used?

<u>Activity</u>	<u>Resources Required</u>

### Keep in Mind That:

- o All participating organizations should be involved in the planning process.

- o Disaster exercises should be held on a regular basis with participation from all involved organizations.
- o You can personally introduce your EM planner to others, which will enhance both his/her visibility and implied authority.

### 3.1.4. PUBLIC INVOLVEMENT/RELATIONS WITH THE COMMUNITY

#### I. MAXIMUM ABILITY TO ALERT THE PUBLIC

The local government EM organizational structure should include a 24-hour, public alerting function which reflects the all hazard approach previously discussed. Moreover, it should be possible to alert all segments of the community, including the handicapped and non-English speaking residents.

An effective way to obtain citizen participation in the community emergency management program is by using residents as part of the public alerting system. Volunteers could be trained to recognize alerting signals and to take the appropriate action when an alert occurs. For example, individuals who are bilingual could alert non-English speaking persons; similarly, senior citizen and other community networks could be utilized to notify members of their groups. However, it is important that these people be involved very early in the planning process. Their cooperation should be obtained in advance of an emergency situation. Like other emergency workers, they must understand the system, know what they are supposed to do (and, equally important, what they are not empowered to do), and accept the responsibility.

Use the following questions to assess the public alerting organization in your community.

1. Identify the person/position responsible for alerting the general public, on behalf of the municipality, to an actual or potential disaster situation.

---

---

2. Check the techniques which your community utilizes to alert the public to the emergency.

- ☐ News Media
- ☐ Sirens
- ☐ Cable Television Network
- ☐ Public Address Equipped Vehicles
- ☐ House-to-House Contact
- ☐ Special Radio Monitoring Devices
- ☐ Emergency Broadcast System
- ☐ Community Organizations

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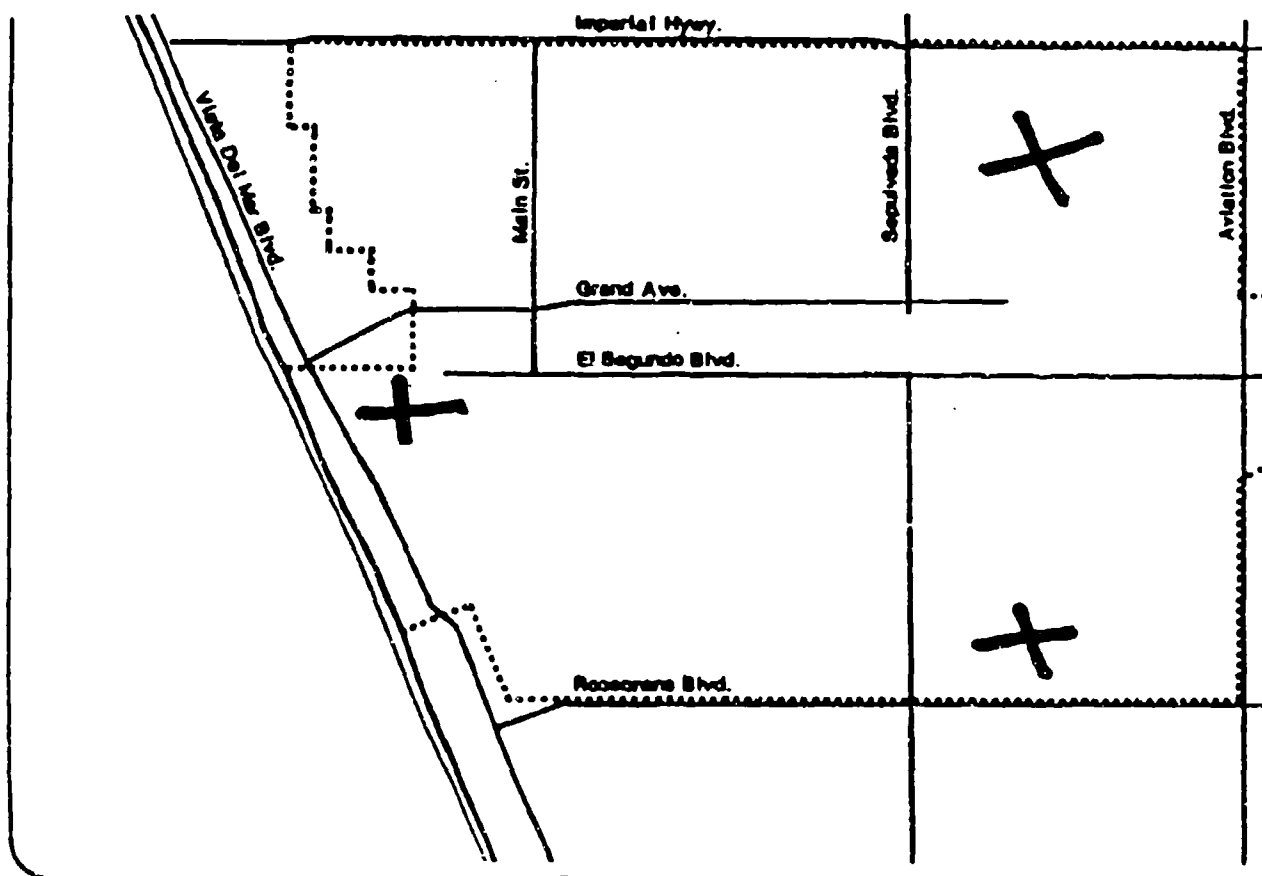


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3. How would the following special groups be alerted?

<u>Group</u>	<u>Technique</u>
Visually impaired	<hr/>
Hearing impaired	<hr/>
Physically handicapped	<hr/>
Mentally handicapped	<hr/>
Non-English speaking	<hr/>
Confined to bed	<hr/>
Care facility patients	<hr/>
Institutionalized	<hr/>
Dependent upon life support equipment	<hr/>
Others <hr/>	<hr/>
<hr/>	<hr/>

4. If sirens are used for public alerting, obtain a map of your community, and draw an "X" at the location of each siren.



### Analyzing the Results

- o List below any special groups for which no special alerting provisions exist.

_____	_____
_____	_____
_____	_____

Begin to plan ways to reach these people in the event of an emergency.

- o How frequently is the alerting system tested?

<input type="checkbox"/> Weekly	<input type="checkbox"/> Semi-annually
<input type="checkbox"/> Monthly	<input type="checkbox"/> Annually
<input type="checkbox"/> Quarterly	<input type="checkbox"/> Never

- o Has the general public been educated as to the meaning of alerting signals, and what to do when they occur?

YES ☐ NO ☐

- o Are there any places in the community out of reach of the sirens?

YES ☐ NO ☐

### Keep in Mind That:

- o An alerting system is not adequate without a corresponding public education program.
- o Use of a single alerting technique, such as sirens, may not be sufficient to reach all members of the community, and may not be appropriate for all types of disasters.

## J. PUBLIC INFORMATION FUNCTION CLEARLY DEFINED

The EM organizational structure should include a designated position to serve a public information function during emergency situations. This person should be the focal point for the release of all disaster-related information and should coordinate the activities of all other public information functions. He or she should provide disaster-related information to the general public and be responsible for coordination with the news media.

It is essential that the person who carries out this function have total credibility. (This credibility is established over a period of time, and can easily be destroyed.) He or she should be knowledgeable about the community in general, be kept well informed of all important aspects of the emergency, and be articulate and comfortable working in the public spotlight under pressure. As fire chief, you obviously have these qualities, and you might be tempted to fill the public information function yourself. But, you should not do so. A better choice for this is the municipality's public information officer, or the PIO for the Fire Department.

Public information and working with the media are so important during disaster situations that they are discussed in a separate section of this HANDBOOK. Please see Part Three, Section 9.6, for further information on these subjects.

## K. PUBLIC-PRIVATE COOPERATION AND COORDINATION

Emergency management is not merely the responsibility of the local government or the Fire Department; it is a community responsibility. Thus, EM planning and organizational structure should include a wide variety of public and private organizations. Adjacent municipalities, the county, charitable and relief agencies, associations of the handicapped, and business groups are all examples of organizations whose involvement is appropriate throughout all phases of EM.

Individuals and organizations which control, influence, or coordinate resources outside of the direct control of local government should be identified. Thus, organizations which routinely provide a given service (e.g., assisting the blind) should be used to provide that service during a disaster (e.g., alerting the blind). Use of these in-place networks has several benefits:

- o the government does not have to provide that service;
- o the familiarity of the network fosters cooperation from the public; and
- o support for the EM program in general is likely to be enhanced, the greater the number and type of organizations which are included in the EM structure.

Be innovative in your use of volunteers. For example, one community has a very effective means of crowd control. It utilizes amateur performers, such as jugglers, clowns, and magicians to entertain large groups of people while they wait in line or are assembled for long periods, with little to do.

As Fire Chief, you probably already have many cooperative relationships with community groups to help deal with fire-related emergencies. If your responsibilities also include other hazards, you may need to build on and expand these arrangements. In doing so, you should consider ways to motivate and provide incentives to both individuals and organizations to actively participate in the emergency management program. These incentives could be both tangible and intangible; for example, recognition and financial compensation.

Finally, it is important to note that meaningful citizen involvement can also be informal. A community with residents who know how to personally cope with minor injuries and damage, and are generally well-prepared for possible disasters, is one whose EM program has already achieved some notable success.

Use the following exercises to summarize your community's EM program in terms of public-private cooperation.



1. The following chart lists organizations which are frequently involved in emergency management. Use the blank lines to write in the names of others.

For each organization, write the general functions that it performs. Examples of functions are:

- |   |   |
|---|---|
| o communications                        | o transportation  |
| o feeding                               | o providing/managing shelters                                 |
| o public information                    | o family unification  |
| o alerting special groups (e.g., blind) | o providing general resource (equipment, supplies, personnel) |
| o providing medicine, clothing, etc.    |   |

Identify the person, designated in the EM organizational structure, who has the responsibility for coordinating with that organization.

ORGANIZATION	FUNCTIONS	COORDINATOR
School Districts Transit Districts County Agencies   		
  Hospitals   		
  Medical Associations Suburban Governments   		
  Utilities   		
  American Red Cross Salvation Army Churches   		
  RACES REACT Military Installations   		
  Home Services   		
  Organizations for Handicapped   		

ORGANIZATION	FUNCTIONS	COORDINATOR
Community Organizations _____ _____ _____		
Association of General Contractors Labor Organizations _____ _____ _____		
Insurance Organizations _____ _____ _____		
Legal Organizations _____ _____ _____		
Private Taxi and Bus Companies _____ _____ _____		
Humane Society, Weather Service, News Media _____ _____ _____		
Supplies _____ _____ _____		

2. Identify emergency management functions, now assigned to municipal personnel, which could be accomplished by community organizations.

<u>Function</u>	<u>Candidate Organization</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

3. Following are some general categories of individuals and organizations that often participate in EM programs. For each category, identify the motivations or incentives your community uses to keep them involved in EM, by writing in the letter(s) (A-L) for all that apply.

A - Tax deductions/credits	G - Status
B - Additional compensation	H - Recognition
C - Acknowledged capability	I - Job requirement
D - Paid overtime	J - Private use of municipal equipment in off hours
E - Training opportunities	K - _____
F - Feelings of usefulness/satisfaction	L - _____

<u>CATEGORY</u>	<u>INCENTIVES</u>
Municipal Employees	_____
Service Clubs	_____
Social Clubs	_____
For-profit companies	_____
Special interest groups	_____
Individual volunteers	_____
Health/welfare organizations	_____
Employees of other municipalities	_____
_____	_____
_____	_____

4. Summarize the public education components of the community emergency management program:

o Describe the component. Examples include:

- weather spotting                      - first aid courses
- CPR courses                              - recognizing alerting signals
- public school drills

o Identify the person/position responsible for producing/ delivering the component

o Describe the frequency that the component is provided (weekly, monthly, annually, etc.)

<u>Component</u>	<u>Individual Responsible</u>	<u>Frequency of Delivery</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Analyzing the Results

o For the persons and organizations listed on Question 1:

- Were they involved in developing the EM plan?

YES \_\_\_\_ NO \_\_\_\_

- Have prerequisites for participation for each person/ organization been established and met? (e.g., health permit for public feeding, mutual aid agreements, CPR certificate)

YES \_\_\_\_ NO \_\_\_\_

- How frequently do representatives of these groups meet to review and coordinate procedures, update phone numbers, etc.?

Monthly	_____	Annually	_____
Quarterly	_____	Never	_____
Semi-annually	_____	Other	_____

- o What additional departments, agencies, and other organizations would you like to participate, or participate more actively, in the EM program? What techniques or incentives could you provide to encourage this?

Organization	Incentive
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Keep in Mind That:

- o Community organizations should be included in all phases of EM (even if not officially included, they may still operate during a disaster, without coordination, to the detriment of all parties).
- o EM functions should be reviewed to determine those which can be accomplished by non-municipal organizations, and those which could benefit from assistance from those organizations.
- o Volunteer organizations may be particularly sensitive to receiving (or not receiving) public acknowledgement and recognition.
- o Community organizations often have strong political connections.

- o To ensure that municipal employees remain on duty and work effectively, it may be necessary to provide special care for their families (e.g., shelter, evacuation, child care).
- o An EM assignment, as a job requirement, may not be sufficient to ensure active and enthusiastic cooperation.
- o Businesses and industries with a training capability may be willing to provide services in the public interest.
- o Without proper education, citizens might have unrealistic expectations about what services the municipality can deliver in a disaster.
- o A strong public education program might reduce the resources needed for other aspects of the EM program.

### 3.1.5. INTERGOVERNMENTAL

Intergovernmental relationships and legal issues, with respect to emergency management, are complicated. Many different agencies and levels of government are involved in providing services and financial support throughout all phases of disaster management. Coordination at the local level is essential to maximize the community's ability to identify and utilize the resources that are available. (Issues related to obtaining funding and other resources are also discussed in Part Three, Section 11). An effective EM program will be organized in such a way as to foster interagency and intergovernmental cooperation, meet existing requirements, and, in general, deal efficiently with the complexities of the system.

The IEMS concept includes two steps directly related to these matters. The descriptions below are quoted from FEMA's IEMS Process Overview.

#### STEP 11 - State/Local Resources:

State and local governments are expected to contribute financially and in kind to capability development and maintenance efforts, as they have done in the past. Some activities identified in the annual increment may be accomplished solely with local resources, while others may require State and/or Federal support. Whatever the source of the funding and other support, each project and activity should represent a necessary building block in the jurisdiction's overall capability development program.

#### STEP 12 - Federal Resources:

The Federal government will continue to provide policy and procedural guidance, financial aid, technical support, and staff resources to assist state and local governments in developing and maintaining capability. FEMA's Comprehensive Cooperative Agreements with states will remain the vehicle for an annual basis.

From the standpoint of organizing a local EM program, three intergovernmental and legal-related considerations are important. These are listed below, consistent with Figure 4. Because these considerations are so closely related, they are discussed together in this section.



#### L. ACTIVE INTERGOVERNMENTAL COORDINATION

The EM organization should be designed to interface effectively with neighboring communities and state and federal EM agencies. In many cases, it will be beneficial for all parties to establish formal cooperative agreements with other jurisdictions. (See also Part Three, Section 9.2, on Working Relationships, including Mutual Aid agreements). On the other hand, attempting to formalize such arrangements may sometimes result in their termination.

Cooperation could be accomplished in a number of ways. For example:

- o One jurisdiction could help another with EM planning;
- o A city might perform disaster monitoring and alerting for an adjacent, smaller community;
- o A regional EM plan could be developed;
- o Neighboring communities might train together and jointly participate in disaster exercises.

#### M. ELIGIBILITY FOR STATE AND FEDERAL SUBSIDIES CONSIDERED

A community planning to seek state or federal subsidies for any phase of emergency management should take into account applicable state and federal requirements when establishing its organizational structure. Local authorities and responsibilities must be very clear with respect to obtaining and administering various kinds of aid. Among the factors which should be taken into account are:

- o Who may represent the community in requesting help;
- o What are the proper channels of communication for such requests;
- o What documentation is needed to support the request;
- o How must funds be handled?

Answers to these questions may be found in the municipal charter, ordinances, orders, or plans. If these issues have not been addressed, they must be resolved as a part of the planning effort.

## N. ABILITY TO MAINTAIN COMPREHENSIVE RECORDS

The EM organizational structure should provide for the collection, recording, and maintenance of disaster-related information in a systematic and standardized way. The nature and extent of the information needed depends on the use to which it will be put. Thus, it is important to determine these informational requirements early in the organizational and planning process, so that the data will be available when and if it is needed. Examples of ways in which EM information might be expected to be used are:

- o General EM operational decisions
- o General EM planning
- o Data base for Hazards Analysis (See Section 3.2.2.A)
- o Public education and information
- o Justification for requesting declaration of disaster
- o Justification for requesting state/federal reimbursement
- o Accountability of personal action
- o Defense in a disaster-related law suit

Summarize the intergovernmental and legal attributes in your community's EM organizational structure by completing the following exercises.

1. List below the major formal and informal cooperative agreements that exist between your community and other units of government.

<u>Unit of Government</u>	<u>Purpose of Agreement</u>	<u>Type of Agreement</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

2. Who has the authority to request assistance from other levels or units of government? How is such assistance requested?

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3. Who has the legal authority to formally declare a "disaster", and request a corresponding declaration from the state and federal governments? How is this done?

---

---

---

4. Describe the major types of information which is maintained, who is responsible for obtaining this information, and who is responsible for recording it.

<u>Information</u>	<u>Responsible for Obtaining</u>	<u>Responsible for Recording</u>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>

### Analyzing the Results

- o Identify potential cooperative agreements which are needed, but do not currently exist.

<u>Unit of Government</u>	<u>Purpose of Agreement</u>	<u>Type of Agreement</u>

- o As far as you know, has the community ever missed out on receiving state or federal funds because it was unaware of their availability or did not follow proper procedures in requesting them? IF YES, describe below:

---

---

---

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---

- o Review the information which the EM organization collects and maintains. Identify any information requirements not being met.

#### Keep in Mind That:

- o In general, assistance cannot be obtained from higher levels of government until all local resources have been committed.
- o Questions of liability should be resolved before cooperative agreements are established.
- o Requests for reimbursement may be denied if the damage and/or costs of repair are not fully documented.

## 3.2 THE PLANNING PROCESS

### 3.2.1 Overview

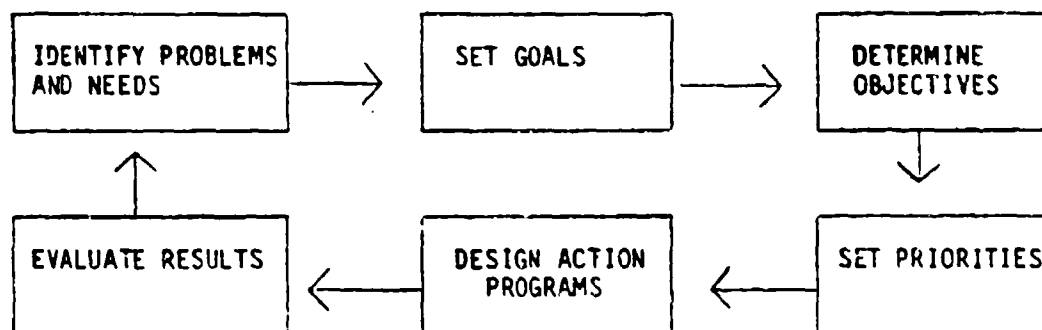
Effective emergency preparedness requires an effective emergency planning process. To a great extent, the ability of you and your community to respond quickly and effectively to a large-scale emergency depends upon the quality and scope of this process. The previous section discussed the characteristics of an effective emergency management organization. This section deals with determining how that organization should function. Going back to the chapter, "How to Use This HANDBOOK", this is the section that describes the process of:

- o examining where you are now;
- o determining where you want to go; and,
- o deciding how you want to get there.

In some ways, the phrase "planning process" is misleading because it may imply that planning is a one-time effort performed only in advance of a disaster operation. People sometimes think that once a document titled "Disaster Plan" has been produced, the process is over. On the contrary, the Plan, itself, may be less important than the process that produced it.

Documents grow old, and can quickly become outdated -- every fire chief is familiar with the disaster plan that hasn't been taken off the shelf in years. The planning process, on the other hand, is ongoing. Planning is as much an attitude and management orientation as it is a group of procedures to produce a document. In a very real sense, planning is never finished. Emergency managers with a planning perspective are constantly re-examining their needs, re-assessing their goals and planned actions, and evaluating results. As the following diagram indicates, this is a circular process, with each step leading to the next.

Figure 5. The Planning Process



The IEMS concept is a specific application of the planning process. Each step is related to a component of the above diagram.

In reality, of course, both the planning process and IEMS are complex. Planning components and IEMS steps overlap and are repeated many times throughout the process. Although oversimplified, the following chart is a helpful way to understand how IEMS fits into an overall planning orientation.

Figure 6. Relationship of IEMS to Planning Process

<u>PLANNING COMPONENT</u>	<u>IEMS STEPS</u>
Identify Problems and Needs	Hazards Analysis Capability Assessment
Set Goals	(FEMA standards are part of the capability assessment step)
Determine Objectives	
Set Priorities	Capability Shortfall
Design Action Programs	Emergency Operations Plans Capability Maintenance Mitigation Multi-Year Development Plan (Emergency Operations)
Evaluate Results	Evaluation Annual Development Increment Annual Work Increment

The remainder of this section is organized according to the above chart. Each planning component, and its related IEMS step(s), will be discussed separately. For some steps, FEMA has prepared detailed guidance on how to apply the IEMS concept. In those cases, the reader is encouraged to use the FEMA guidance as a resource; the HANDBOOK will summarize and reference the material, but will not repeat it extensively.

### 3.2.2 IDENTIFY PROBLEMS AND NEEDS

The first step in the planning process must be to identify the problems and needs faced by your community. Just as no single emergency management organization is appropriate for all localities, neither is there a single emergency response plan or set of mitigation efforts that applies across the board. Every community is different, both in terms of the dangers it faces and the resources it has available.

Your first task, as an emergency management leader, is to determine the potential for emergency situations to occur in your community and to evaluate your ability to respond. This can be accomplished by utilizing two IEMS steps: Hazards Analysis and Capability Assessment.

#### A. HAZARDS ANALYSIS

Hazards analysis is a systematic approach which a community can determine its potential vulnerability to an emergency situation. This approach is a way of anticipating what might happen, and what the likely impacts various kinds of emergencies might have on the community.

FEMA has issued a publication in the IEMS series entitled, HAZARDS ANALYSIS FOR EMERGENCY MANAGEMENT, INTERIM GUIDANCE; September, 1983; CPG 1-101. This document describes the process in detail and provides formulas and charts to help you perform a hazards analysis in your own community.

You should obtain and use this document as part of your emergency management efforts. Some major points from this Guidance are highlighted below.

Hazards Analysis requires two kinds of knowledge:

- o Knowledge of the hazards the community faces, and
- o Knowledge of the nature of the community itself.

Information which is collected and analyzed on these subjects helps emergency managers ascertain how vulnerable their community is to different kinds of disasters. Such information provides part of the basis on which resource allocation decisions can be made.

The hazards analysis system is essentially a process for using a common set of criteria to determine and compare the risks that your community faces from a variety of threats or hazards. Hazards are rated and scored in a way that allows for easy comparison with one another.

The rating and scoring system uses four criteria:

1. HISTORY - the record of occurrence of previous disasters in the community;
2. VULNERABILITY - the number of persons who might be killed and injured, and the value of property which might be destroyed and damaged;
3. MAXIMUM THREAT - the "worst case" scenario of a hazard, i.e., that set of circumstances in which the emergency will have the greatest impact; and
4. PROBABILITY - the likelihood that the disaster will occur.

For each hazard identified, each of the above criteria is rated either low, medium, or high. A scoring and weighting system is then used to evaluate and compare hazards' risks. These calculations are simple and straightforward, and are clearly described in the FEMA GUIDANCE.



The preceding section of this HANDBOOK, "Getting Organized", pointed out that multiple use of resources is beneficial in an emergency management organization. Similarly, doing a hazards analysis is useful in other respects than producing a ranked hazard list. For instance, the process of performing a hazard analysis can help the emergency management team gain a more sophisticated understanding of the relationships among hazards and the secondary effects which may be triggered by various kinds of disasters. (The FEMA figure 7 and chart 8 illustrate these points.)

Hazards Analysis also lends itself to preparing material which can be used for related purposes. For example:

Standardized Reporting: A standardized report form can be developed to collect data on all incidents, above and beyond that needed for routine operations. Such data can be used

- 1) to provide justification for requesting Federal assistance following a disaster; and
- 2) to maintain an accurate and current data base for future hazards analyses.

See figure 9 for a sample form.

Public Information and Motivation: Data which is acquired during a hazard analysis can be repackaged and used to inform the public and their executive and elected officials of the nature of the risks the community faces and the importance of being prepared. Risk overlay maps and other materials can be prepared which are very effective in getting the message across.

## B. CAPABILITY ASSESSMENT

Hazards Analysis tells you about dangers that your community faces; Capability Assessment tells you how well your community is likely to deal with those dangers.

Figure 7.

A cascade of disasters from one triggering event

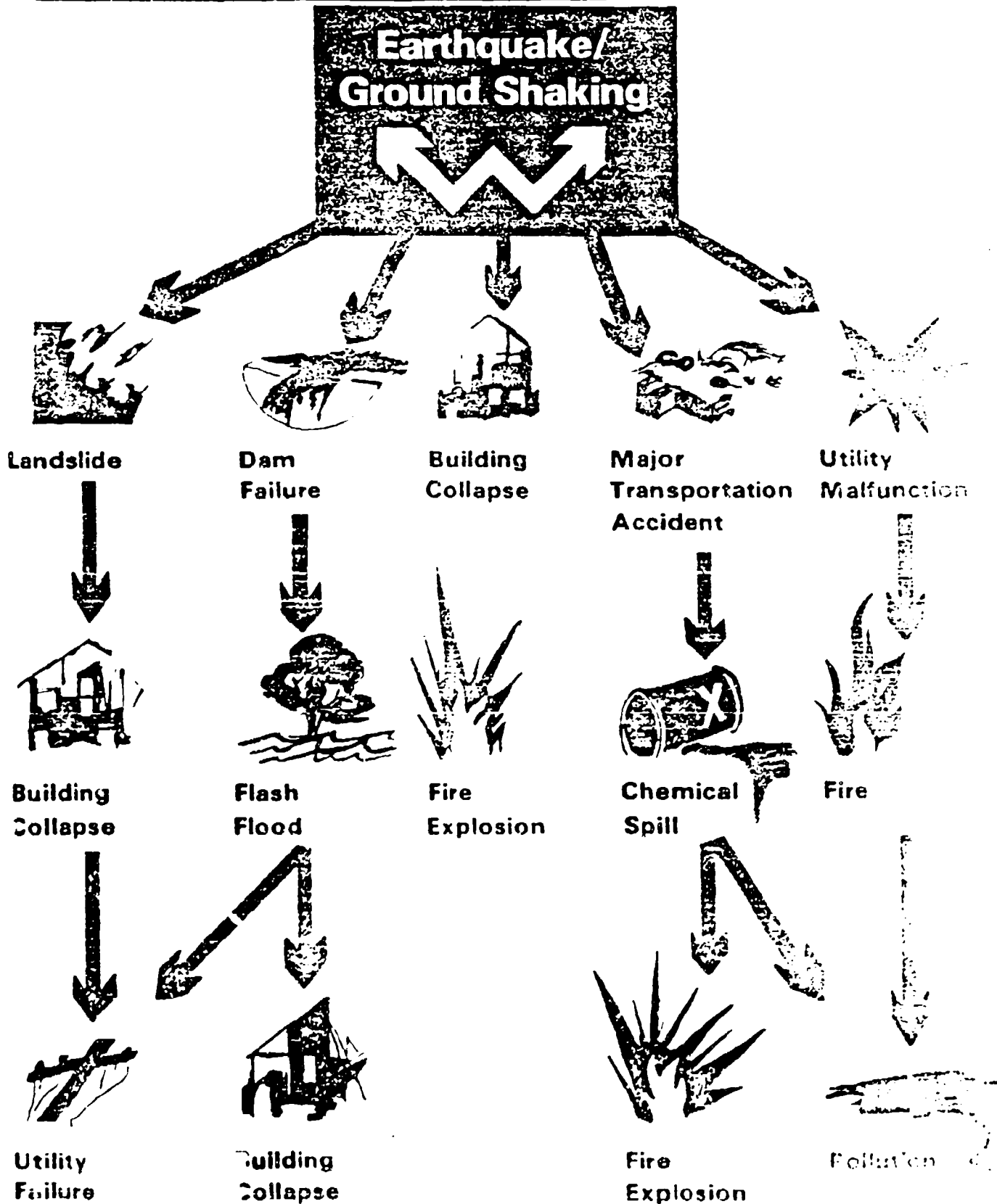


Figure 8.

# Secondary Events

## Table D

Secondary events  
can be triggered  
by disaster.

### Secondary Events

#### Primary Disaster (Triggering)

	Landslide	Tsunami	Blind	Flash Flood	Slow Rise Flood	Fallout	Fire	Levee/Dam Failure	Transportation Accident	Train or Rapid Transit	Ship	Aircraft	Power Failure	Fuel Shortage	Water Supply Failure	Hazardous Materials	Biological Incident
Earthquake	•	•				•	•	•	•			•	•	•		•	•
Landslide			•					•	•	•		•	•	•			
Tsunami (Tidal Wave)								•	•	•		•		•		•	•
Hurricane						•			•	•		•					
Wind	•							•	•	•		•		•			
Fire Winter Storm	•			•	•			•	•	•	•	•	•				
Hurricane			•	•					•	•		•	•	•		•	
Light						•								•			
Fire												•				•	
Volcano	•					•		•				•					
Levee/Dam Failure			•	•				•	•			•		•		•	•
Transportation Accidents						•						•				•	•
Train or Rapid Transit						•						•				•	•
Ship												•				•	•
Aircraft						•						•				•	•
Power Failure																	
Fuel Shortage																	
Water Supply Failure																	
Electromagnetic Disturbance						•		•	•	•	•	•	•	•		•	•
Hazardous Materials						•											
Biological Incident			•			•	•					•				•	•
Nuclear Facility			•			•	•					•				•	•
Nuclear Attack			•	•		•	•	•	•	•	•	•	•	•		•	•

LEGEND: Secondary events that can be triggered by a primary disaster are indicated by a dot (•) in the corresponding cell.

FEMA has established standards and criteria for 15 emergency management functions. These are spelled out in their IEMS series Guidance, CAPABILITY ASSESSMENT AND STANDARDS; November, 1983; CPG 1-102. By using this document, you will be able to assess your current capability with respect to emergency preparedness and response and identify specific areas in which improvements need to be made.

The functional areas, and the elements within each for which assessment criteria have been developed, are summarized at the end of this section. A review of this list will provide you with a snapshot of the activities and resources that an effective emergency management organization should be able to provide. Notice that, although not identical, they are compatible with the organizational principles identified in Part I of the HANDBOOK, "Getting Organized". The HANDBOOK has also utilized the contents of the CAPABILITY ASSESSMENT directly. The next section, "Setting Goals", suggests using the functional standards as starting points for the goal development process.

#### Functional Areas and Major Elements

##### A. Emergency Management Organization

1. Legal authority
2. Budget development
3. Selection and training of the coordinator and staff
4. Hazards Analysis and multi-year development planning
5. Written agreements for aid and resources
6. Private sector support

##### B. Emergency Operations Planning

1. Responsibilities
2. Plan components
3. Plan content
4. Approval and promulgation
5. Plan distribution
6. Plan maintenance

##### C. Resource Management

1. Evaluation of needs
2. Planning and preparedness
3. Timely and effective utilization

Figure 9.

Jurisdiction(s) involved: \_\_\_\_\_ Reporter: \_\_\_\_\_ Date: \_\_\_\_\_  
 \_\_\_\_\_ Congressional Districts: \_\_\_\_\_  
 \_\_\_\_\_ State Sen. Districts: \_\_\_\_\_  
 Total area population: \_\_\_\_\_ State Rep. Districts: \_\_\_\_\_  
 Type of Incident: \_\_\_\_\_  
 Start date: \_\_\_\_\_ Duration: \_\_\_\_\_ Date/time 1st public warning: \_\_\_\_\_  
 Local agencies on scene: \_\_\_\_\_  
 State help requested: ☐ No ☐ Yes Type given: \_\_\_\_\_  
 Lead agency tasked: \_\_\_\_\_ Date/time alerted: \_\_\_\_\_ Date/time on-site: \_\_\_\_\_  
 Private Sector: Deaths \_\_\_\_\_ Injuries \_\_\_\_\_ Hospitalized \_\_\_\_\_ Treated/released \_\_\_\_\_  
 Evacuated \_\_\_\_\_ Sheltered \_\_\_\_\_ Temp. hsg. \_\_\_\_\_ Other \_\_\_\_\_

Total Area Damage Estimates (\$000)	Homes	Apts., Multi-Family Res.	Mobile Homes	Bus. & Ind.	Ag. & Equip.	Blac. & Equip.	Crops	Stock
Destroyed (=85%+)	# \$	# \$	# \$	# \$	# \$	# \$	# \$	# \$
Damaged (=10-84%)	# \$	# \$	# \$	# \$	# \$	# \$	# \$	# \$
Est. Cost Repairs	\$	\$	\$	\$	\$	\$	\$	\$
Insurance %								

Bus. closed: 1-7 days \_\_\_\_\_ 8-30 \_\_\_\_\_ 30+ \_\_\_\_\_ Unemployed: 1-7 days \_\_\_\_\_ 8-30 \_\_\_\_\_ 30+ \_\_\_\_\_  
 Public Facilities: Roads \_\_\_\_\_ Bridges \_\_\_\_\_ Culverts \_\_\_\_\_  
 Water Control: Dams \_\_\_\_\_ Levees \_\_\_\_\_ Channels \_\_\_\_\_  
 Buildings: \_\_\_\_\_ Supplies/inventory \_\_\_\_\_ Vehicles/equip. \_\_\_\_\_  
 Utilities: Water \$ \_\_\_\_\_ Sewer \$ \_\_\_\_\_ Light/power \$ \_\_\_\_\_ Other \_\_\_\_\_  
 Effects: \_\_\_\_\_

Recovery: Est. durations: \_\_\_\_\_ Special needs: \_\_\_\_\_

COSTS (\$000)	Private	Local	State	Federal	Total
Debris clearance	\$	\$	\$	\$	\$
Life/health safety actions	\$	\$	\$	\$	\$
Property safety actions	\$	\$	\$	\$	\$
Road repair	\$	\$	\$	\$	\$
Public prop. repair/replacement	\$	\$	\$	\$	\$
Private prop. repair/replacement	\$	\$	\$	\$	\$
Staff: overtime, new hires, expenses	\$	\$	\$	\$	\$
Special services	\$	\$	\$	\$	\$

Special problems: \_\_\_\_\_

Recommendations: \_\_\_\_\_

Declaration Status: ☐ Local Issued ☐ State Issued ☐ Special Issued ☐ Presidential Request ☐ Presidential Issued  
 \_\_\_\_\_ E \_\_\_\_\_ MD \_\_\_\_\_ E \_\_\_\_\_ MD \_\_\_\_\_

NGA 1/82

#### D. Direction and Control

1. State and local facilities
2. Assignment of responsibilities
3. Protection
4. Emergency operations
5. Life support
6. Damage assessment
7. Maintenance

#### E. Emergency Communications

1. Primary emergency communications
2. Backup emergency communications
3. Staffing and training
4. Protection
5. Emergency power
6. Standard operating procedures
7. The Emergency Broadcast System (EBS)
8. Maintenance

#### F. Alerting and Warning

1. The warning system
2. Warning points
3. Staffing and training
4. Emergency power
5. Standard operating procedures
6. Special locations/arrangements
7. Maintenance

#### G. Emergency Public Information

1. Point of contact for official information
2. Coordination/authoritative spokesperson
3. Development/distribution of EPI materials
4. Rumor control
5. Media
6. Re-entry
7. The Emergency Broadcast System (EBS)

#### H. Continuity of Government

1. Lines of succession
2. Safeguarding of essential records
3. Predelegation of authority
4. Alternate headquarters
5. Protection of government resources

#### I. Shelter Protection

1. Congregate Lodging Facility (CLF)
2. Standard public fallout shelter
3. Shelter upgrading
4. Expedient fallout shelters
5. Blast protection
6. Stocking
7. Marking
8. Reception and care
9. Shelter managers

#### J. Evacuation

1. Preparation
2. Movement

#### K. Protective Measures

1. Prevention of individual exposure to hazards
2. Mitigation of impending or actual exposure
3. Classification system/action level system
4. Supply and maintenance of protective devices
5. Procedures for recovery and re-entry

#### L. Emergency Support Services

1. Preparedness
2. Law enforcement
3. Fire and rescue
4. Public health
5. Medical services
6. Public works
7. Transportation
8. Utilities

#### M. Emergency Reporting

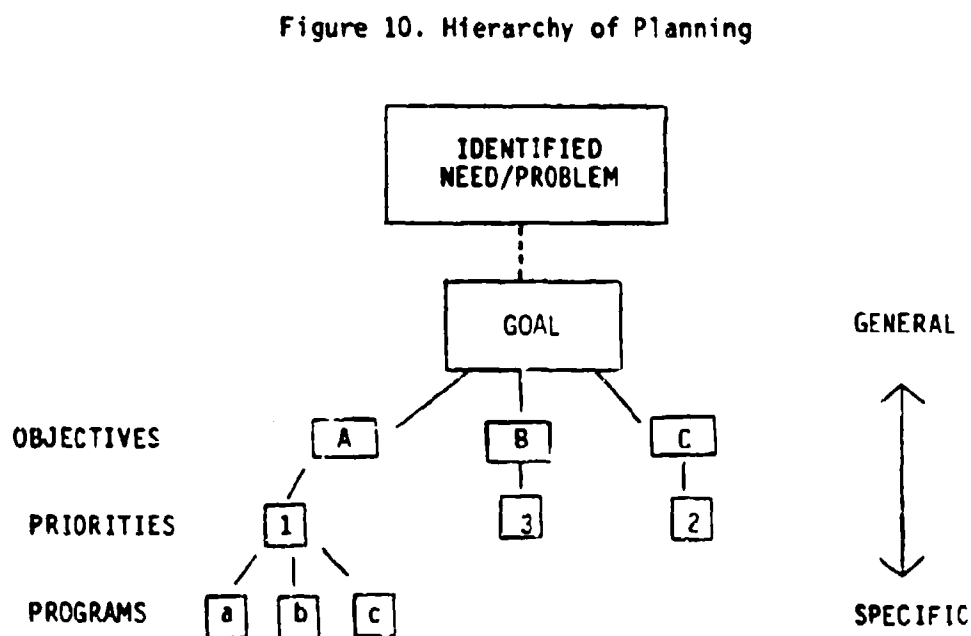
1. Monitoring
2. Collection
3. Processing
4. Analysis
5. Dissemination

### 3.2.3 SETTING GOALS

The preceding section discussed ways of identifying needs and problems; that is, it suggested ways to determine "where you are now." This section discusses goal setting, the first task in determining "where you want to be and how you want to get there."

Emergency management goals are statements which describe the kind and extent of emergency management capability you want for your community. Goals are broad, basic, and future-oriented, but not time-specific. A goal represents general results you want to achieve. Goal setting provides the link between needs and problems which have previously been identified and a series of progressively-focused steps required to address those needs and problems.

Looked at as a whole, the process is a kind of hierarchical framework for planning and action in which goal setting is an early step. This hierarchy is illustrated in the following diagram; the boxes correspond to the planning elements found in Figure 6.





## A. How to Set Goals: Things to Keep in Mind

Goal setting can be accomplished in several different ways. However, there are some things that tend to make the process more effective and the results more useful.

### o Getting Started

Somebody has to initiate the process; that is, somebody has to "sell" the idea to public and private sector leaders who should be involved. Obtaining a commitment from other local officials and being able to count on broad participation from community leaders are essential if you are to develop emergency management goals that are truly community-wide. As the person with the greatest knowledge of and responsibility for emergency management in your locality, you are probably the best person to get the ball rolling.

### o Leadership

Leading the goal setting process is not the same as initiating it. Goal setting is a working partnership among persons with a wide variety of personal and institutional loyalties and interests. The leader must be able to steer this group without dominating it. The leader must also be someone who can keep the group on course and ensure that the goals which are formulated represent a consensus among the participants. In addition to organizational and interpersonal skills, he/she must also have the time and interest to devote to the task.

### o Working with the Public

Regardless of how the goal setting process is handled, at some point the public needs to be involved. Goal setting efforts that want to emphasize community participation can utilize citizens on special committees and task forces. Or the goal setting group can be smaller, with the goals presented in public hearings. One thing to pay attention to is the nature of the "sunshine laws" in your locality. It is very important to know what

is allowed and forbidden in the way of meetings involving public officials. You should also carefully plan how you want to work with the media throughout the process.

o Beware of Easy Answers

Before you begin to develop goals, you will have completed a fairly thorough needs assessment. Sometimes, goals will seem to emerge almost automatically from these identified needs. In those cases, the goal seems to be the positive mirror image or flip side of a need or problem. For example, if "Inadequate Training" is identified as a problem, "Better Training" might be stated as a goal to deal with that problem. Be cautious about this tendency. A goal should be more than a mere reaction to a need; it should represent a positive vision of the future, based on the operating policies that will be developed and resource allocations that will be made.

Goals can also be so vague or farfetched that they are essentially meaningless. While goals are supposed to be general, they are also supposed to be reality-based. On the other hand, goals can sometimes be too narrow. Goal setting participants may have special or hidden agendas which they may try to push through the group. When they are successful, a goal may be adopted that does not represent a consensus.

EXAMPLE  
EMERGENCY PREPAREDNESS GOALS

PREPARATION FOR DISASTERS

1. Educate citizens and city employees to properly react in a disaster.
2. Ensure that city operations and procedures interface with -- and meet the requirements of -- higher levels of government (e.g., County, State, Federal Emergency Management Agency).
3. Provide standard and simple organizational structure, plans, charts, checklists and agreements for the executive staff to use as tools to effectively manage a disaster situation.
4. Equip, organize, activate, and operate the city EOC in a timely and effective manner.
5. Provide communication links between city departments, outside agencies, and the public, in order to facilitate an expedient exchange of information.
6. Have knowledge of resources readily available to the city and to adequately manage these resources.

DISASTER OPERATIONS

7. Provide the earliest and most valid possible warning of severe weather and other emergency situations.
8. Accurately size-up the incident to understand its scope and potential effect.
9. Provide smooth transition from the routine operations of city departments to city-wide emergency operations.
10. Create a responsive public information system for all citizens of the city.
11. Effectively command and coordinate the city's response to disasters.
12. Conduct coordinated, efficient, and responsive field operations.

RECOVERY

13. Maintain continuity of routine government operations and service levels during a disaster.
14. Provide an expedient return to normalcy for the community.
15. Provide a post-incident summary of activities and costs.

## B. Using IEMS

If you have completed the Hazards Analysis and Capability Assessment described in the previous section, you will have a fairly good idea of your community's strengths and weaknesses with respect to dealing with emergencies. Also, you will have organized much of this information according to the IEMS functional format. You are now in an excellent position to use the IEMS functional standards as a starting point for the goal setting process in your community. The remainder of this section provides suggestions and materials to accomplish this.

One important note, however: do not assume that the IEMS structure is the only correct, or necessarily the best, way to go about setting goals. Your community may want to approach the task quite differently. Or, you may find some of the IEMS goals helpful, but not others. The IEMS "method" is presented here only as a suggestion for a way to tackle the goal setting process.

1. Photocopy at least 15 copies of the blank GOALS AND OBJECTIVES WORKSHEET, found at the end of this section.
2. Using the list on the following pages, on each worksheet, in the space provided, write in an IEMS Function and its corresponding Goal Statement.
3. Examine the results of your capability assessment. For each function, develop a Community Emergency Management Goal which is both consistent with the IEMS Goal and responsive to your community's needs and problems with respect to that function.
4. Do not write more than one EM goal on a page. If you want to have more than one goal for a given function, copy the IEMS information on another worksheet and write your goal there. (This will make it much easier to keep organized, and to keep track of objectives when you begin that task.)

5. Feel free to use the Worksheets to write in goals not related to an IEMS function.
6. Save the worksheets for use in the next task, "Determining Objectives".

### C. IEMS FUNCTIONAL STANDARDS RESTATED AS GOALS

<u>FUNCTION</u>	<u>GOAL STATEMENT</u>
A. Emergency Management	To have an emergency management organization prepared to carry out a program that coordinates mitigation, preparedness, response and recovery for all emergencies.
B. Emergency Operations Planning	To have an Emergency Operations Plan (EOP) that addresses all hazards that pose a significant threat to the jurisdiction. (The EOP should provide for a coordinated response by emergency forces and for the effective utilization of all available resources, so that loss of life and damage to property are minimized. The planning process should involve the active participation of all departments of local government and private sector organizations and individuals involved in an emergency. The EOP should be promulgated by the jurisdiction's chief executive.)
C. Resource Management	That the emergency coordinator be able to identify, obligate, and make effective use of the human and material resources needed to deal with any or all emergencies.
D. Direction and Control	To have the capability to direct and control those activities of government that are essential to saving lives and protecting property, during and following a major emergency.
E. Emergency Communications	To develop an emergency communications capability allowing key officials to direct and control response forces.

- F. Alerting and Warning To have the administrative and physical means of receiving alerts at all times; providing prompt alerts in the event of a major emergency.
- G. Emergency Public Information To have an emergency public information system that provides for the dissemination of official information and instruction in order to facilitate timely and appropriate response in an emergency.
- H. Continuity of Government That continuity of government be designed to assure survival of government and enhance survival of the population and recovery in the event of any emergency.
- I. Shelter Protection To provide suitable protection and emergency lodging in shelters with essential life support systems for persons displaced as a result of any type of emergency.
- J. Evacuation That in the development, maintenance, and exercise of an EOP, a capability exists to evacuate people from threatened areas.
- K. Protective Measures To develop and maintain protective measures that address all hazards threatening the jurisdiction.
- L. Emergency Support Services That support services have the operational planning and preparedness capabilities to respond in the event of an emergency.
- M. Emergency Reporting That the jurisdiction have the capability to organize and disseminate essential information for all emergencies.
- N. Training and Education To provide training and education for public officials, emergency response personnel, and the private sector that will provide a variety of skills necessary to help reduce or eliminate the hazards of emergencies and increase effectiveness to respond to and recover from emergencies of all types.
- O. Exercises and Drills To conduct periodic exercises to evaluate capabilities.

D. GOALS AND OBJECTIVES WORKSHEET

IEMS FUNCTION \_\_\_\_\_

IEMS GOAL \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

YOUR COMMUNITY EM GOAL \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

OBJECTIVES

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_
4. \_\_\_\_\_  
\_\_\_\_\_

### 3.2.4 DETERMINING OBJECTIVES

Determining objectives is the first step in developing a work plan. This is the place in the planning process where you begin to decide what you want to accomplish in terms of the kind and extent of emergency management capability, and in what period of time you want to do so. Objectives are the refinement of goals. Where goals are broad, basic, and unscheduled, objectives are specific, targetable, measurable, and intended to be accomplished in a specific period of time.

Each goal should have at least one objective, and may have several. Determining objectives is where you begin to branch out, to deal with the variety of issues and kinds of actions that need to be taken with respect to accomplishing the goal. Thus, for example, a given goal may have separate objectives relating to personnel management, equipment acquisition, and agency coordination.

There are many ways to go about establishing objectives. One method which often works well is to divide the work between the EM policy-setting group (i.e., the group that developed the goals) and department and/or other agency staff. Using this approach, for each goal, the goal-setting group decides the objectives in terms of content or specifies some activities that it would like accomplished. Then, the staff calculates how much time, money, and level of effort are required to achieve each objective or perform each activity. This method has several advantages:

- o It divides the workload;
- o It ensures wide participation in the planning process;
- o It helps to ensure that resource needs and schedules are realistically estimated by utilizing departmental and agency expertise.

In the preceding section, IEMS standards were presented as one possibility appropriate for use as EM goals. When you did your capability assessment, you used the elements and criteria found in the IEMS Guidance under each functional standard. Just as the standards might have been



helpful to you in setting goals, the elements might be a helpful starting place in determining your objectives. Again, it must be emphasized that this is only one way of proceeding. Your objectives must meet your own goals and community needs, or they will be meaningless. You may use your goal-setting worksheets to record your objectives.

### 3.2.5 SETTING PRIORITIES

Setting priorities is the first point in the planning process in which hard choices need to be made. The diagram on Page 3-70 shows priority setting as primarily a function of ranking objectives. In reality, priority setting occurs throughout the planning process, from deciding in which order to pursue goals to choosing among alternatives to carry out programs.

It's not unusual to find that you have more goals than you can realistically hope to accomplish. Priority setting at the goal-setting level is where you may have to decide which goals are most important, and which can be postponed to a later time. Since money is often a key factor, setting priorities at the objectives level may mean making choices on the basis of what is affordable.

#### A. Establishing Criteria

In order to set priorities, you need some criteria to use to compare alternatives. Generally, there are at least three factors to consider in making choices:

- o Importance - What is critically important and needs action soonest;
- o Feasibility - How realistic is it that the goal (objective, etc.) be accomplished;
- o Influence - How much ability/power do you (or the planning group) have in getting the work accomplished.

Depending on the nature of the problem, you can add additional factors or categorize some of the ones above more specifically. For

instance, the URBAN GUIDE lists as selection criteria: cost, benefit, legislative, and political categories. These criteria might be considered to be refinements of feasibility and/or influence.

A simple way to use this system is by ranking each goal (objective, etc.) under consideration on a scale of one to five and comparing the results. The following example shows how to do this using the three factors mentioned above. (The lower the score the better. Anything with an average score of 3 or more is probably not easily accomplished; therefore, it would be best to concentrate on those with average scores of 2 or less.)

#### PRIORITIZATION EXAMPLE

There are five problems: A, B, C, D, E. Problems are ranked according to each factor. In this example, E is the most important, but the least feasible, and the one you have the least influence to solve.

	<u>Importance</u>	<u>Feasibility</u>	<u>Influence</u>
		MOST	
<u>RANK</u>			
1	E	A	C
2	C	C	B
3	B	B	A
4	D	D	D
5	A	E	E
		LEAST	

Calculate the average rank for each problem by adding up the RANKS for each and dividing by the number of factors (in this example, 3). Average ranks are:

A - 3.0    B - 2.7    C - 1.7    D - 4.0    E - 3.7

Problem C is likely to be the easiest to solve. Problem B is next, followed by A. Problems D and E will be very difficult to solve. Using the above analysis, you should concentrate your efforts first on C, then B.

Note that one potential benefit of using this approach is that by demonstrating success in dealing with one problem, you may improve the feasibility and/or influence to deal with others, thus increasing the likelihood of solving them (such as Problems D and E).

#### B. Capability Shortfall

One way to begin setting priorities is with the "Capability Shortfall." When you did your capability assessment, you compared various elements of your EM capability with FEMA's standards for those functions. The capability shortfall is the difference between your current capability and the FEMA criteria for optimum functioning. If you used the functional standards as part of your goal structure and the elements and criteria in determining objectives, you are now able to easily use the capability shortfall results in the planning process as input to priority setting.

The capability shortfall determination activity assesses EM elements independently; it does not score or rank them or compare one against another. While it is important to improve all areas of capability shortfall, in fact it may not be possible to tackle all at once. Thus, you may need to set priorities as to which areas you will deal with first. One way this can be accomplished is to list the items of capability shortfall for each functional standard, and to prioritize these items using the prioritization method described above. The results of this exercise can then be used as the basis for EM operations planning.

### 3.2.6 DESIGNING ACTION PROGRAMS

#### A. Overview

The point at which goals, objectives, and priorities become operational is the point at which they are translated into action programs. Those previous steps have provided you with an EM planning framework; now you are

ready to develop the specific emergency management plans and that programs your department and community need.

In order to draw up workable plans, you will need to make some estimates and decisions related to, at least, the following management areas:

- o Authority and responsibility - determining the departments/ individuals to be in charge of the various aspects of the program;
- o Cost - estimating how much it will cost to carry out the program for personnel, equipment, supplies, etc.;
- o Funding - identifying the department/agency/level of government which will provide the funds;
- o Schedule - determining the period of time necessary to design and implement the program.

Some of this information may have been assembled when you formulated objectives or established priorities. However, it is probable that you will require additional and/or more detailed data than you needed earlier in the planning process.

In many communities, resources of all types -- time, money, and personnel -- are seriously limited, and it is not possible to carry out every program which has been designed. If this is the situation in your municipality, what you may be doing in this step is preparing alternative programs which meet previously-established goals, objectives, and priorities. At this point, you will need to again determine priorities, this time to choose among the potential program alternatives. The priority setting method described in the preceding section can be used here, as well.

In designing detailed plans and action programs, the planning team often works closely with various agency and departmental staff. The team continues to provide the overall direction for the EM program, while the staff gathers and prepares the detailed information and estimates necessary for the planning group to make informed choices.

## B. Mitigation

Mitigation efforts -- i.e., utilizing resources to eliminate a hazard or to reduce the effects of the hazard -- should be given a high priority in planning. In addition to the obvious benefits to life and property, successful mitigation efforts will reduce the level of EM capability needed to be maintained by the community. Effective mitigation activities will thus be reflected in future hazards analyses and capability assessments. For a more complete discussion of mitigation, including some lists of mitigation measures, see Section 4.

## C. Capability Maintenance

It is extremely important that communities maintain their emergency management ability over time. Some communities experience disasters only infrequently; thus, they have few opportunities for operational reality-testing of their EM plans and procedures. Among the ways to help maintain a high level of readiness is by updating plans, testing and servicing equipment, training personnel, and testing procedures and systems. These activities must be carried out on a regular basis, as part of the community's commitment to emergency management effectiveness.

The IEMS concept recognizes the importance of capability maintenance in a number of ways:

- o By identifying it as a separate step;
- o By specifying evaluation, both as a separate step and as an orientation which runs throughout the process; and
- o By including standards, elements, and criteria, which directly support capability maintenance, in the set of capability assessment functions.

If you follow the planning approach described in the section below, "Developing Plans", you will be able to develop programs focused on capability maintenance.

#### D. Emergency Operations Plans

The IEMS concept promotes community EM planning geared to maintaining and improving EM functional capability, rather than developing plans on a specific hazard basis. The plan should be developed with functional annexes that apply to the hazards identified as threats to the community. If some activities are unique to certain hazards, they should be described separately, possibly appended to the appropriate functional annexes. The important point of an emergency operations plan is not the precise format, but the approach -- i.e., that each function is considered from a multi-hazard perspective.

As discussed above, emergency management programs must always be currently operational and able to meet existing community needs, regardless of how elaborate or sophisticated the EM plans are for the future. Part Four of the HANDBOOK provides "Checklists for Specific Hazards". This information may be helpful in maintaining your readiness to respond to present emergencies while you are making the transition from a hazard-specific planning approach to a functional, all-hazard EM orientation.

#### E. Developing Plans

If you have been following the IEMS structure, you can be fairly certain that your planning is consistently addressing two fundamental EM areas: the hazards that your community faces and the capability of your community to effectively deal with those hazards. The following section describes another component of the IEMS planning system which allows a department to prepare a work-plan to translate its need-based goals, objectives, and priorities into operational programs.

## Multi-Year Development Planning

Multi-Year Development Planning (MYDP) is an IEMS step which has two important uses:

- o It is part of an overall planning, budgeting, and allocating process designed to strengthen EM capability at all levels of government -- local, regional, state and federal;
- o It provides a useful structure for local EM program planning which is geared to the unique hazard and capability profile of an individual community.

Thus, in addition to fostering the concept of integrated emergency planning, MYDP is a useful planning tool in its own right.

The remainder of this section summarizes the MYDP planning process. Note that in preparing the plan, you will probably be able to utilize much of the information you produced when you developed goals, objectives, and priorities. There are three main aspects of MYDP, with a special planning form associated with each. (Copies are reproduced on the following pages.)

- 1) LOCAL PLANNING WORKSHEET - provides for the development of a plan to resolve capability shortfalls in terms of IEMS functions, standards, and criteria.

### Summary of Major Steps:

- o Identify functional areas, standards, and criteria of shortfall.
- o Determine action step(s) needed to correct the shortfall.
- o Assign a priority to each item of shortfall.
- o Determine personnel support needed to accomplish each action step in terms of level of effort and salaries.
- o Determine technical assistance needed to accomplish each action step, e.g., training, architectural/engineering, etc.

# 11. LOCAL PLANNING WORKSHEET (by function)

**SAMPLE**

FUNCTION 2. Detection and Control

1. Hazard/ Priority Index	2. Capability Shortfalls (list by elements and criteria)	3. Actions to Meet Criteria (in sequential order)	4. Staff Needed by Action			5. Facilities/Equipment/Materials Needed by Action				9. Total Funds Needed	7. Timeframe by Action
			Local P.S. V.S.	\$	Tech. Assis.	Total Required	Number Existing	Still Needed	\$		
Low	E.g. 5 - Live Summary Criteria 6 - EOC has plans to train before beginning of incident	1. Develop plan for operations in any number of inc. scenarios using inc. summary report	10	795						995	1 mo.
		2. Make SOPs	1	85						85	1 wk.
		3. Clear alarm, storage space in EOC	2	120						120	2 wks.
		4. Add supplies & equip. refrigeration to EOC	15	1050		20 square 2 sq. feet	0 existing 1 sq. feet	12 square 2 sq. feet	300 4.2 K	5.6 K	2 mo.
									6,500	4 mo.	

Technical Assistance (describe using the following abbreviations):

AE = Architectural/Engineering  
 EP = EPM Protection  
 EX = Exercises  
 FP = Fire Prevention and Control  
 HP = Health Physics  
 PG = Program Guidance  
 PL = Planning  
 SD = Systems Design  
 TR = Training  
 Other (specify)



- o Determine the facilities, equipment, and materials needed to accomplish each action step.
  - o Estimate the total amount of funds needed to accomplish the action step.
  - o Estimate the length of time required to accomplish the action step.
- 2) LOCAL MULTI-YEAR FORECAST - allows you to use the data previously compiled as a basis for projecting time and costs for building capability in areas of shortfall; also, provides estimates with respect to capability maintenance.

Summary of Major Steps:

- o Transfer applicable information from previously-completed planning sheets, grouping items in order of priority starting with those shortfalls with high priority.
  - o Estimate when to initiate action items, and when those actions will be completed. Aim to accomplish high-priority items first.
  - o Estimate how much it will cost in each year to accomplish the actions.
  - o Review completed forecast to identify areas of duplication.
- 3) LOCAL MULTI-YEAR DEVELOPMENT PLAN - summarizes requirements for technical and financial assistance for each IEMS function.

Summary of Major Steps:

- o List funds received for each function, from all local, state, federal, and other sources for shortfalls; also, estimate most distant out-year completion date for resolving shortfall.
- o Follow same procedures for determining cost of maintaining capability for each function.

OMB No. 3007-0102, expires 1  
Optional for local areas (or as  
directed by States). May not  
mandated for use by FEMA.

**SAMPL**

**12. LOCAL MULTI-YEAR FORECAST (by function)**

Function B. Disasters and Control

Name of Organization: Linn County E.M. Agency

Inquiries to: Many Square (402) 546-3434

1. Hazard/ Priority Index	2. Capability Shortfalls (list by elements and criteria)	3. Tech. Assis.*	4. Total Time- frame	5. Initiate Actions				6. Complete Actions				7. Out Year Completion Costs	8. Total Funds Needed	9. Funds Needed by Federal Fiscal Year		
				83	84	85	86	87	88	89	90			91	92	93
Low	Est. 5, current 6 - M. any personnel/annexes	—	4 mos			X							37K	—	—	7K
10. Total Funds Needed													7K			
11. Total Funds Needed by Federal Fiscal Year													(subtotal for worksheet) (grand total for function)	(subtotal for worksheet) (grand total for function)	(subtotal for worksheet) (grand total for function)	(subtotal for worksheet) (grand total for function)

13. Maintenance of Existing Capability ..... (grand total for function) 1900 1000 1100 1

\*Functional Assistance (describe using the following abbreviations)

AE = Architectural/Engineering

FP = Fire Protection and Control

SI = System Design

Other (specify)

HP = Health Program

OMB No. 3067-0142, expires 11/8  
Optional for local areas (or as  
directed by States). May not be  
mandated for use by FEMA.

### 13. LOCAL MULTI-YEAR DEVELOPMENT PLAN (all functions)--Part A: Shortfalls

Name of Organization Leavenworth Co. Emergency Management Agency  
Location 215 W. 2nd St. Cherokee, OK, 74730  
Inquiries to Miss. Smith (800) 368-3636

**SAMPLE**

1. Functions	2. Tech. Assets	3. Funds Received in Federal FY 83				4. Funds Received in Federal FY 84				5. Funds Needed in Federal FY 85				6. Funds Needed in Federal FY 86				7. Out Year Complete Goals	
		Total	Local	State	Other	FEMA	Total	Local	State	Other	FEMA	Total	Local	State	Other	FEMA			
A. Emergency Management Organization																			
B. Emergency Operations Planning																			
C. Resource Management																			
D. Detection and Control																			
E. Emergency Communications																			
F. Alerting and Warning																			
G. Emergency Public Information																			
H. Continuity of Government																			
I. Shelter Production																			
J. Evacuation																			
K. Protection Measures																			
L. Emergency Support Services																			
M. Emergency Organizing																			
N. Training and Education																			
O. Exercises and Drills																			
B. Grand Total																			

OMB No. 3007-0142, expires 11/85.  
Optional for local areas (or as  
directed by States). May not be  
mandated for use by FEMA.

**SAMPLE**

14. LOCAL MULTI-YEAR DEVELOPMENT PLAN (all functions)--Part B: Maintenance

Name of Organization Lehigh Co. Emergency Management Agency  
Location 201 City Center Scranton, Pa.  
Inquiries to Mr. Scott (610) 355-3636

1. Functions	2. Funds Received in Federal FY 83			3. Funds Received in Federal FY 84			4. Funds Received in Federal FY 85			5. Funds Needed in Federal FY 85		
	Total	Local	State/Other/FEMA	Total	Local	State/Other/FEMA	Total	Local	State/Other/FEMA	Total	Local	State/Other/FEMA
A. Emergency Management Organization												
B. Emergency Operations Planning												
C. Resource Management												
D. Detection and Control	900	400	-	900	100	900	900	100	900	900	100	900
E. Emergency Communications												
F. Alerting and Warning												
G. Emergency Public Information												
H. Continuity of Government												
I. Shelter Protection												
J. Evacuation												
K. Protective Measures												
L. Emergency Support Services												
M. Emergency Reporting												
N. Training and Education												
O. Exercises and Drills												
<b>6. Grand Total</b>												

### 3.2.7 EVALUATING RESULTS

#### A. Overview

Evaluating results is the step which closes the loop in the planning process -- the step when you compare what you intended to achieve against actual results. (REMINDER: Space limitations of the HANDBOOK necessitate a simplified discussion of this subject. In reality, evaluation takes place over and over, throughout the process, and applies to every planning element and program.)

When evaluating results, you look back and assess your progress and accomplishments, chiefly in two respects:

- o Reaching your goals - For example, are you reaching your objectives? Are your plans, procedures, and operations effective? Are they taking you where you want to go? Is the relationship between available resources and costs of carrying out the EM program acceptable, particularly in terms of the results you have achieved?
- o Relevance of goals - For example, do your goals reflect needs which still exist? Have you made so much progress that some problems are close to solution? Have new needs arisen? Was the original goals-objectives-priorities-programs chain the best way to address the particular need, or should you have tried a different approach?

Depending on the answers to these and similar questions, evaluation may mean abandoning or modifying your goals, objectives, priorities, plans, programs, and/or operations because they are no longer appropriate; because they are not worth the effort required; or perhaps because you have made so much progress that the need which prompted them is no longer pressing. This is as it should be. Goals, plans, and programs which remain unreviewed and unchanged, over long periods of time, are generally useless.

The IEMS strategy strongly emphasizes evaluation. Two important areas to assess are EM capability and mitigation. The outcome of emergency operations should be analyzed in terms of actual vis-a-vis required capability, and the results of this analysis should be used in subsequent capability assessments and in determining capability shortfalls. Also every, EM

operational evaluation should ascertain the need for new and/or modified mitigation efforts. Finally, evaluation should not be merely a post-disaster activity; simulations, tests, and other exercises should be conducted regularly.

IEMS also includes two other steps which require plans revision based on the results of regular evaluation activities: Annual Development Increment and Annual Work Increment. These are described, briefly, below.

#### B. Annual Development Increment

The multi-year development plan, produced in the preceding section, is a framework for improving capability in the long term. However, it is rarely possible to predict how situations will change over time. Thus, the multi-year plan needs to be re-examined every year and modified to meet changing conditions.

Based on a careful evaluation of where they have come so far, EM managers should determine in detail what they want to accomplish next year -- i.e., the following year's annual increment. This information is used for local planning, and is provided to state and local officials, to help determine requirements for financial and technical assistance. The process provides emergency managers with the ability to keep their current planning on target, but also consistent with their overall EM strategy for the future.

#### C. Annual Work Increment

Operational plans should be revised annually to reflect new, improved levels of capability and a reduction in capability shortfall. Many factors will contribute to this: for example, the successful completion of capability development projects; experience gained in actual emergency operations; the results of training and EM exercises. Subsequent capability assessments and shortfall analyses will reflect this improved state of affairs. The results should be factored into the planning process, and the specific operations plans and emergency procedures should be modified to utilize the higher levels of capability.

#### 4. MITIGATION

##### 4.1 Overview

Mitigation activities are all those actions that eliminate or reduce the probability of a disaster occurring and/or minimize the effects of those disasters that do occur. One of the findings of the National Governors' Association Emergency Preparedness Study was that mitigation is a relatively minor part of state and local emergency management efforts. The following table is taken from the NGA Report.

15. What, if anything, did your organization do before the disaster which reduced the impact on people and property?

Mitigation Activity	Percent of Cases*
Develop/install warning systems	33%
Building codes/engineering	23
General public information and education	23
Construction and maintenance	20
Land use management/zoning	13
Stockpiling	10
Flood plain management	10
Develop/install communications systems	10
Develop financial assistance programs	10
Insurance programs	7
Equipment acquisition	3
*Multiple responses permitted.	

Several factors probably account for this situation:

- o The state-of-the-art: mitigation measures for many hazards still need to be developed;
- o Public apathy: the need for mitigation is often obvious only after a disaster has occurred;
- o Cost and profits: for example, mitigation programs that restrict development in flood plains are likely to depress land values and property tax revenues.

Another finding from the NGA study is that mitigation activities are focused more on natural than man-made disasters.

#### 16. Mitigation x Natural/Man-Made Disasters

Mitigation Activity	Natural*	Man-Made*
Warning Systems	45%	10%
Building Codes/Engineering	30	10
Public Information/Education	25	20
Construction/Maintenance	25	10
Land Use Management	15	10
Stockpiling	15	--
Flood Plain Management	15	--
Communications Systems	5	20
Financial Assistance	15	--
Insurance Programs	10	--
Equipment Acquisition	5	--
*Multiple responses permitted.		



#### 4.2 Mitigation Activities

The NGA study data also suggests that effective mitigation efforts increase the effectiveness of preparedness activities, which, in turn, improves response and recovery. Mitigation activities clearly should be a much more important part of emergency management planning and implementation. A few examples of municipal management and technical areas appropriate for, and related to, mitigation efforts are:

- |                           |                             |
|---------------------------|-----------------------------|
| o Building standards      | o Technical information     |
| o Communication systems   | o Insurance                 |
| o Construction            | o Land use management       |
| o E.O.C.                  | o Laws and ordinances       |
| o Equipment and apparatus | o Warning systems           |
| o Financing               | o Welfare                   |
| o Hazard analysis         | o Preservation of resources |
| o Public education        | o Inspection                |
| o Transportation controls | o Crowd control procedures  |

Examples of mitigation measures related to specific hazards are found on following pages. Some suggestions are also included in Part Four, "Checklists for Specific Hazards".

#### 4.3 Mitigation Measures for Selected Natural Disasters

[To a large extent, information in this section is adapted from four publications on natural hazards:

- o Gilbert F. White and J. Eugene Haas, Assessment of Research on Natural Hazards (Cambridge, Mass.: The MIT Press, 1975).
- o Office of Coastal Zone Management, U.S. Department of Commerce, Natural Hazard Management in Coastal Areas (Washington, D.C.: 1976).
- o J.H. Wiggins Co., Natural Hazards: A Building Loss Mitigation Assessment: Final Report (Washington, D.C.: National Science Foundation, 1978).
- o Ian Burton, Robert W. Kates, and Gilbert F. White, The Environment as Hazard (New York, N.Y.: Oxford University Press, 1978).

SOURCE: Council of State Governments, The States and Natural Hazards, Lexington, Kentucky, July, 1979.]

## FLOODS AND FLASH FLOODS

- o Land use management, with special attention to floodplains.
- o Federal flood insurance.
- o Building construction and codes.
- o Warning systems.
- o Control and protective works (e.g., flood proofing, dams, reservoirs, levees, dikes, drainage systems, etc.).

## HURRICANES

- o Cloud seeding and other hurricane modification techniques.
- o Building code regulation for hurricane-force winds and for reasonable wave force.
- o Mobile home anchorage requirements.
- o Evacuation routes and facilities.
- o Use of national flood insurance, also insurance available for wind hazards.
- o Land use controls adapted to local conditions.
- o Use of flood and wind-proofing technology, especially in public facilities.
- o Possible use of well-constructed, high-rise evacuation centers.
- o Preparedness, response, relief, and rehabilitation measures, including effective warning capability.

## TORNADOS

- o Building codes, with provisions for high wind resistance (some of which may also apply to other hazards).
- o Warning systems.
- o In-house shelters.
- o Insurance.

## EARTHQUAKES

- o Improved delineation of seismic risk areas.
- o Earthquake resistant new construction.
- o Steps to minimize damage to existing structures.
- o Land use management.
- o Earthquake insurance.
- o Seismic risk disclosure in property transactions.
- o Advanced earthquake prediction technology, accompanied by state evaluation of earthquake prediction.
- o Reduction of associated hazards, with special attention to lifelines engineering and critical facilities.
- o Differentiation between measures related to advance prediction, and those applicable to disaster occurrences.

### DROUGHTS

- o Land use regulation especially applicable to drought-prone areas.
- o Soil erosion controls.
- o Improved agricultural cultivation practices.
- o Regulated irrigation practices.
- o Water supply protection and conservation.
- o Improved drought prediction and forecasting.
- o Stimulation of rainfall by weather modification (e.g., cloud seeding.)
- o Desalination of sea water.

### BLIZZARDS/WINTER STORMS

- o Prediction and warning systems.
- o Response plans especially adapted to such events.
- o Flexible scheduling of public events and activities.
- o Alternate energy supply systems.

### AVALANCHES

- o Mapping of avalanche zones as an aid to public and private land management.
- o Land use constraints on public lands; and on site undergoing construction activities.
- o Prevention through terrain modification.
- o Triggering small avalanches to forestall larger ones.
- o Disclosure of hazard potential in real estate transactions.
- o Warning systems.
- o Relief and recovery readiness effective for ice and snow conditions.

### SHORELINE EROSION

- o Coastal zoning to include land use controls.
- o Shoreline zoning programs to protect critical areas.
- o Building code restrictions.
- o Public purchase of eroding shore lands.
- o Structural installations, including stabilization by means of sea walls, etc.
- o Land fill.

### LANDSLIDES

- o Land use management.
- o Application of geologic engineering knowledge and practice to prevent or correct landsliding.
- o Stripping regulation.

### TSUNAMIS

- o Warning systems.
- o Evacuation of threatened areas.
- o Tsunami prediction.
- o Education programs.
- o Limited structural and land use controls.

### EXPANSIVE SOILS

- o Land use management.
- o Building codes.
- o Grading codes.
- o Policy requiring pre-construction control of soil moisture, soil density, and site drainage control.
- o Provision of soil analysis in real estate transactions.
- o Injection of substitute fluids.

### VOLCANOS

- o Land use management.
- o Possible lava flow controls.
- o Prediction and warning systems.
- o Evacuation routes.

### HIGH WINDS

- o Building codes.
- o Mobile home tiedowns.
- o Planting tree-shelter belts.

## 5. RESPONSE

### 5.1 Overview

Response activities are those which occur immediately following the onset of a disaster. These actions provide immediate emergency assistance to protect the lives and property of the victims of the crisis. Among the areas of concern are:

- |   |   |
|---|---|
| o Alerting and warning  | o Mobilizing personnel and equipment                |
| o Search and rescue   | o Treating the injured                              |
| o Requesting assistance from other levels of government   | o Providing food, clothing, and shelter to evacuees |
| o Debris removal and damage assessment  | o Restoring essential utilities                     |
| o Evacuation  | o Public information                                |
| o Communications systems  | o Disaster declaration                              |
| o Activating the EOC  | o Crowd control                                     |
| o Law enforcement   | o Animal control                                    |
| o Intergovernmental and inter-agency liaison  | o Recordkeeping                                     |
| o Communicating with non-English speaking persons   | o Transitioning to emergency operations procedures  |
| o Helping citizens with special needs, such as the elderly, handicapped, and those on special life support systems. |   |

When a disaster occurs, tasks such as the above must be handled virtually immediately, and usually simultaneously. Decisions must be made quickly and acted upon just as quickly. Additional personnel and other resources must be obtained, coordinated, and utilized to meet critical emergency needs. Agencies and departments must make an instant transition from routine to emergency status. The public is worried and confused, and often frightened. All of this puts a tremendous strain on the community.

Essentially, the purpose of planning is to make as many decisions as possible in advance of the disaster. To the extent that such issues as policies, procedures, lines of authority, and responsibilities are tested and established before the emergency situation, less burden is placed on the EM organization during the actual crisis.

## 5.2 Worksheet to Record Emergency Response Activities Covered in EM Plan

The WORKSHEET on the following pages will assist you in determining whether your emergency management plan covers important functions related to emergency operations and response. The 21 emergency response tasks from the preceding page are listed, with space to describe the following:

- o What needs to be done;
- o Who is responsible for accomplishing the task;
- o What constraints, strengths and weaknesses must be dealt with in accomplishing the task;
- o How the task will be performed/managed.

You should add, delete, and/or modify the tasks which are specified to match your own community's situation. After completing this exercise, you should have a good "snapshot" of the state of emergency operational readiness in your community.

EMERGENCY RESPONSE TASKS COVERED IN EM PLAN  
WORKSHEET

TASKS	COVERED IN PLAN? (YES OR NO)	WHAT NEEDS TO BE DONE	PERSON/POSITION WITH LEAD RESPONSIBILITY	ORGANIZATIONAL/INDI- VIDUAL CONSTRAINTS STRENGTHS/WEAKNESSES TO BE DEALT WITH	HOW WILL THE TASK BE MANAGED/ PERFORMED
DISASTER DECLARATION					
ALERTING & WARNING					
SEARCH & RESCUE					

EMERGENCY RESPONSE TASKS COVERED IN EM PLAN  
WORKSHEET (Cont'd.)

TASKS	COVERED IN PLAN? (YES OR NO)	WHAT NEEDS TO BE DONE	PERSON/POSITION WITH LEAD RESPONSIBILITY	ORGANIZATIONAL/INDI- VIDUAL CONSTRAINTS STRENGTHS/WEAKNESSES TO BE DEALT WITH	HOW WILL THE TASK BE MANAGED/ PERFORMED
TRANSITION- ING TO EMERGENCY OPERATIONS					
TREATING THE INJURED					
REQUESTING ASSISTANCE FROM OTHER LEVELS OF GOVERNMENT					



# EMERGENCY RESPONSE TASKS COVERED IN EM PLAN

WORKSHEET (Cont'd.)

TASKS	COVERED IN PLAN? (YES OR NO)	WHAT NEEDS TO BE DONE	PERSON/POSITION WITH LEAD RESPONSIBILITY	ORGANIZATIONAL/INDI- VIDUAL CONSTRAINTS STRENGTHS/WEAKNESSES TO BE DEALT WITH	HOW WILL THE TASK BE MANAGED/ PERFORMED
MOBILIZING PERSONNEL & EQUIPMENT					
DEBRIS REMOVAL & DAMAGE ASSESSMENT					
ACTIVATING THE EOC					

EMERGENCY RESPONSE TASKS COVERED IN EM PLAN  
WORKSHEET (Cont'd.)

TASKS	COVERED IN PLAN? (YES OR NO)	WHAT NEEDS TO BE DONE	PERSON/POSITION WITH LEAD RESPONSIBILITY	ORGANIZATIONAL/INDI- VIDUAL CONSTRAINTS STRENGTHS/WEAKNESSES TO BE DEALT WITH	HOW WILL THE TASK BE MANAGED/ PERFORMED
INTERGOVERN- MENTAL & INTER-AGENCY LIAISON					
LAW ENFORCE- MENT					
EVACUATION					

EMERGENCY RESPONSE TASKS COVERED IN EM PLAN  
WORKSHEET (Cont'd.)

TASKS	COVERED IN PLAN? (YES OR NO)	WHAT NEEDS TO BE DONE	PERSON/POSITION WITH LEAD RESPONSIBILITY	ORGANIZATIONAL/INDI- VIDUAL CONSTRAINTS STRENGTHS/WEAKNESSES TO BE DEALT WITH	HOW WILL THE TASK BE MANAGED/ TASK BE PERFORMED
PROVIDING FOOD, CLOTHING, & SHELTER TO EVACUEES					
CROWD CONTROL					
COMMUNICAT- ING WITH NON-ENGLISH SPEAKING PERSONS					

# EMERGENCY RESPONSE TASKS COVERED IN EM PLAN

## WORKSHEET (Cont'd.)

TASKS	COVERED IN PLAN? (YES OR NO)	WHAT NEEDS TO BE DONE	PERSON/POSITION WITH LEAD RESPONSIBILITY	ORGANIZATIONAL/INDI- VIDUAL CONSTRAINTS STRENGTHS/WEAKNESSES TO BE DEALT WITH	HOW WILL THE TASK BE MANAGED/ PERFORMED
HELPING CITIZENS WITH SPECIAL NEEDS, SUCH AS ELDERLY, HANDICAPPED, AND THOSE ON SPECIAL LIFE SUPPORT SYSTEMS.					
COMMUNICA- TIONS SYSTEMS					
PUBLIC IN- FORMATION					

EMERGENCY RESPONSE TASKS COVERED IN EM PLAN  
WORKSHEET (Cont'd.)

TASKS	COVERED IN PLAN? (YES OR NO)	WHAT NEEDS TO BE DONE	PERSON/POSITION WITH LEAD RESPONSIBILITY	ORGANIZATIONAL/INDI- VIDUAL CONSTRAINTS STRENGTHS/WEAKNESSES TO BE DEALT WITH	HOW WILL THE TASK BE MANAGED/ TASK BE PERFORMED
RESTORING ESSENTIAL UTILITIES					
ANIMAL CONTROL					
RECORD- KEEPING					

## 6. RECOVERY

Recovery activities are designed to bring the community back to normal functioning as soon as possible. Generally, recovery activities fall into two groups:

- o Short-term: Actions designed to return vital human support systems to minimum operating standards. The short-term period lasts for about two weeks.
- o Long-term: Activities intended to return the community to normal or improved levels of functioning. Long-term activities may last for years.

The following table from the National Governor's Association study\* describes the time periods during which recovery takes place:

Recovery Times

How soon after the initial emergency actions did you begin these activities?		
How long did these recovery activities continue?		
(Proportion of Recovery Activities)		
Time	Started	Ended
Immediately	79%	2%
1/2 - 1 day	7	3
1+ days - 2 weeks	7	38
2+ weeks - 1 month	1	4
1+ months - 3 months	3	8
3+ months - 6 months	2	12
6+ months - 9 months	2	3
9+ months - 1 year	--	6
1+ years	--	22
	101%	98%

\* All tables in this section are from the NGA study.

Examples of activities and issues related to recovery are:

- o Temporary shelter
- o Clean-up
- o Legal assistance
- o Public information and education
- o Community planning
- o Insurance benefits
- o State and federal assistance
- o Reconstruction and rehabilitation
- o Medical and psychiatric treatment
- o Mitigation

The NGA study found that organizational recovery services were provided as follows:

**Recovery Activities**

What responsibilities, if any, did your organization have in helping get the victims back on their feet and the community back to normal?

Recovery Activity	Percent of Cases*
Coordination	50%
Technical Advice	47
Clean-up	43
Provide Resources	43
Public Information	37
Information Gathering	37
Financial Assistance	36
Welfare	30
Record Keeping	7
Legal Assistance	3
*Multiple responses permitted.	

There is often a fine line between emergency response and short-term recovery activities, and between short- and long-term efforts. Many activities are continuous, spanning two or more disaster phases. The table below summarizes the usual duration for a few selected recovery activities.

Short-, and Long-Term Recovery Activities

Short-Term (2 weeks)	Long-Term (2+ weeks)	Short-, and Long-Term (Continuous)
Clean-up	Legal Assistance	Financial Assistance
Provide Resources	Public Aid Infor- mation	Information Gathering
Welfare	Technical Advice	Record-Keeping
		Coordination

One interesting finding of the NGA study was that fewer recovery efforts were performed for man-made disasters than for natural disasters (see following table). The reasons for this are not clear. It could be that man-made disasters are more localized or that there are better private mechanisms for handling them. Another possibility is that they differ from natural disasters in some essential ways, so that recovery requirements differ also.



## 20. Recovery x Natural/Man-Made Disasters

Recovery Activity	Natural*	Man-Made*
Coordination	65%	20%
Technical Advice	65	10
Clean-up	55	20
Provide Resources	55	20
Public Information	45	20
Information Gathering	50	10
Financial Assistance	45	10
Welfare	35	20
Record Keeping	10	--
Legal Assistance	--	10
*Multiple responses permitted		

Recovery is the phase in which local government is least self-sufficient. Much of the work in this phase involves redevelopment of a damaged economy; accomplishing this usually requires fiscal assistance from outside the community, particularly from the state and federal government. The local emergency program will be most effective if it includes personnel with skills and experience in public policy, and economic planning and budgeting. Expertise and familiarity are needed with respect to applicable state and federal laws, programs, and regulations; insurance and other sources of private support; and intergovernmental liaison.

Finally, with the experience of the disaster still fresh, recovery is also a period to assess the effectiveness and efficiency of the community's emergency management program. Recovery is a time to evaluate the EM plan: to examine needs and problems; possibly to modify and/or establish new goals, objectives, priorities, and action programs; and, to begin new and/or accelerated mitigation efforts.

PART THREE: SPECIAL ISSUES

## 7. MANAGING CHANGE\*

### 7.1 Overview

The preceding chapters have examined emergency management mainly from a planning and organizational perspective. Some general management principles have been identified and discussed, and for each CEM phase, some areas for potential program development have been suggested. Among the subjects covered thus far are:

- o Phases of CEM
- o The IEMS concept
- o Attributes of an effective EM organization
- o Main components of the planning process

This chapter looks at EM from a different perspective, that of carrying out the planning process in a real world context and establishing and/or modifying EM programs developed as a result of that process. Two aspects of this issue are briefly discussed:

- o Examining the organizational context in which the change is to take place, and
- o Facilitating change by taking into account factors which may cause resistance.

These principles apply both to the community EM organization as a whole and within the fire department, itself. Thus, the information is relevant regardless of the scope of your EM responsibilities.

### 7.2 Examining the Organizational Context

Organizations have personalities, characteristic ways of approaching their missions and carrying out their activities. Fire departments and EM organizations are no different; any given department will have a unique set

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\*This section is based on material presented in Organizational Development for Operating Managers, Michael E. McGill, New York, N.Y., AMACOM, 1977.

of patterns which describes the way it functions. In determining the most effective way to conduct EM planning, establish new programs, and, in general, implement change, the Chief needs to understand how his/her department and community work in terms of several key factors:

- o planning styles;
- o power and leadership;
- o interpersonal relationships;
- o pace of work;
- o resources and costs;
- o relationships with contractors and consultants; and
- o performance criteria.

Each factor is described below briefly.

Planning Styles. Some departments rely on detailed plans with highly structured schedules and carefully defined staff assignments. Others prefer a less structured approach; for example, utilizing informal meetings to produce general guidelines. The latter tend to test out new ideas a little at a time before committing themselves to a major planning effort.

Both approaches are compatible with the planning model described earlier and with the IEMS concept. The development of new EM programs can be a complex process. The plans to accomplish this should be in accordance with the overall planning styles of the municipality and the department.

Power and Leadership. The distribution of power and the way leadership is exercised differ with departments. At one extreme, all decisions are made at the top with little or no input from subordinates; at the other extreme are departments in which some authority is delegated and decision-making responsibility more widely distributed.

Community EM planning, by its nature, is in some conflict with strong central control. At the same time, clear, strong lines of command are essential attributes for an effective EM organization. To achieve a true

community EM system, agencies which tend to rely on unilateral decision-making may have to delegate some authority. However, new programs should be consistent with, and supportive of, established lines of authority.

Interpersonal Relationships. Relationships within community agencies and municipal departments vary. In some, relationships are formal and impersonal; in others, relationships are more informal and deal with personal, as well as work-related concerns. Like any other change, the development and/or modification of the community's EM system may threaten some individuals and benefit others.

Management decisions regarding implementation need to be made with an understanding of existing interpersonal patterns. This is important for two reasons. First, the degree to which a department takes a personal interest in its staff should help determine the manner in which change is handled. Some departments will need to provide many opportunities for personal discussions with personnel about the effects new programs are likely to have on their jobs, careers, and the working atmosphere in general. Other departments will be able to handle the transition on a more formal and structured basis. Second, what looks good on an organization chart may not work in reality. It is important to know which personnel work well together and which do not. This is one reason that staff participation is important in implementing change; municipal and departmental managers, community leaders, or outside consultants may not always be aware of which combinations of people are more or less effective.

Pace of Work. Community agencies and departments also differ in their temperament and energy level. Some generate work at a fast pace; turn-around time is rapid and results are immediate. For instance, Fire Departments and other public safety service departments are characterized by bursts of high levels of activity and fast feedback concerning the results of their actions and decisions. Organizations like these are often able to handle rapid change.

Other agencies work in a more deliberate fashion; both physically and psychologically, they operate more slowly. Their organizational mission may be more analytical, and the feedback they get as a result of their efforts may be delayed or ambiguous. In these departments, change may be more evolutionary in character.

As the EM planning effort gains momentum, some departments may want to move quickly to set up new programs. Others may feel pressured to introduce changes before they feel really ready to do so. Still others may want to "study the problem" longer than is really necessary. It is important that the planning effort carefully consider the best pace to implement EM changes and new programs to ensure consistency with the general tempo of the work and to maximize the community's ability to effectively carry out these programs.

Resources and Costs. As in any other program, the costs involved in emergency management fall into two main categories: direct expenses, such as the costs of personnel, facilities, supplies, and equipment; and opportunity costs, the time spent creating and implementing new EM programs, time that might be spent for other purposes. Municipal and department resources are finite, and there are many competing demands on the time and money which are available.

The extent to which a community decides to implement or modify its EM programs, the scope of its effort, and the nature of its choices, will be affected by these constraints. Careful analysis of current and future available resources is essential and should be made as early as possible. The priority setting task in the planning process is one place where these factors are carefully taken into consideration -- for instance, where the tradeoffs between risks and costs are weighed. Agency managers and department heads usually have a large number of alternatives. Their choices need to take into account both the size of the initial investment (financial and other) and the ability of their community to maintain it in the future, without undue burden.

### Relationships with Contractors and Consultants.

Sometimes communities use consultants or contractors to help in the EM planning process. In these cases, it is important that relationships be clear from the beginning. In some fields, the client is relatively dependent on the consultant; that is, the responsibility for decisions rests almost entirely with the consultant, who is an expert.

In EM, relationships with consultants are "client centered"; the municipality or department retains primary responsibility for identifying and describing the problem, specifying goals and objectives, and determining the best course of action. With respect to emergency management, the responsibility always resides with you and your EM colleagues. Outside experts can often provide valuable advice and help structure the planning and decision-making process, but the responsibility for EM decisions remains with you and your community, and the consequences of those decisions can never be avoided.

Nature of Performance Criteria. In the private sector, the most common way of measuring success is in terms of profit -- how the program affects the "bottom line". Public service, and especially emergency management, is different. While emergency managers need to adhere to a budget and it may be possible and desirable to effect cost savings by following a particular course of action, when dealing with public safety and welfare such savings may not be the main criterion for judging the merits of the action.

The criteria for measuring the value of an EM program are complicated and sometimes ambiguous. They involve intangibles such as effectiveness, productivity, and quality of decisions related to the safety of life and property. All of these are difficult or impossible to measure. The planning process previously described attempts to rationalize these considerations and make them more explicit. Fire Chiefs should try to clarify their own expectations of EM programs to avoid disappointment and frustration over the results.

### 7.3 Facilitating Change

Knowing and taking into account your organizational context are important considerations in planning and instituting change. Also important is the way you work within that context -- that is, the way potential changes are presented to those persons who will be affected by them. Certain factors will help determine whether the changes will be accomplished more or less smoothly.

The way in which an individual reacts to change depends on four factors:

- o The amount of information he or she has regarding the change effort, prior to the change;
- o His/her degree of participation in the change effort;
- o The level of trust he/she has in the initiator of the change;  
and
- o His/her experience with change in the past.

Depending on the above, a person will assess the change and react to it in different ways, as summarized on the chart on the following page:



## 21. RESPONSE TO PROPOSED ORGANIZATIONAL CHANGE

<u>ASSESSMENT OF CHANGE</u>	<u>REACTION TO CHANGE</u>	<u>EXAMPLES OF ACTIONS</u>
DESTRUCTIVE: Change is seen as destructive to individuals/community goals.	ACTIVE RESISTANCE	<ul style="list-style-type: none"> <li>o Council blocks change</li> <li>o Monies not appropriated</li> <li>o Department head fired</li> <li>o Negative lobbying</li> <li>o Negative press</li> </ul>
THREATENING: Change is seen as threatening to individuals/community goals.	PASSIVE RESISTANCE	<ul style="list-style-type: none"> <li>o Staff drags its feet</li> <li>o Political undermining</li> </ul>
UNCERTAIN: Change is seen as neither positively nor negatively affecting individuals/community goals.	TOLERANCE	<ul style="list-style-type: none"> <li>o Noncommittal attitude</li> <li>o Watch and wait</li> </ul>
POSITIVE: Change is seen as beneficial for individuals/community goals.	ACTIVE SUPPORT	<ul style="list-style-type: none"> <li>o Positive lobbying</li> <li>o Active participation</li> </ul>

As the preceding chart indicates, there are a number of possible ways for an individual to respond to organizational change. However, those attitudes depend to a great extent on how the change is managed. While some of these factors are not entirely controllable, there are some things that can be done by those in charge of instituting change to facilitate the process and help make the outcome more positive for all concerned.

One of the most important ways to minimize resistance to change is to maintain good communications with all personnel about the changes that are taking place. Included in the information that should be provided are:

- o a review of the community and/or department's history of change (to acknowledge past experience);
- o a statement of the change initiator's motives and anticipated rewards (to foster trust);
- o a review of the experience other communities and/or departments have had with the kinds of change proposed, and a thorough explanation of the plan for this organization (to foster as thorough an understanding of expectations as possible); and,
- o an explanation of everybody's roles and responsibilities, including decisions for which they may provide input (to clarify the extent to which individuals can participate in change decisions).

Also important is the choice of the person to manage and coordinate the change effort. He or she should possess as many of the following traits as possible.

## 22. CHARACTERISTICS OF AN EFFECTIVE EM LEADER

He/she must:

- o be a superior leader;
- o be technically knowledgeable about emergency management;
- o be able to integrate the activities and efforts of diverse groups and individuals;
- o know what his organization can, will, and will not do;
- o have a proven track record of accomplishments so that he can gain the respect of peers, managers, and subordinates;
- o be personally dynamic and persuasive;
- o be a hard worker and driver, and one who motivates others;
- o be fair;
- o be able to juggle resources in such a manner as to get the job done given time and cost constraints;
- o be flexible enough to handle changed directions and respond positively;
- o exercise good judgement at all times;
- o be a good planner and possess a good business sense;
- o be knowledgeable about the tools of project management and know when and how they should be applied;
- o have the personality to deal with all types of people and situations and keep a level head;
- o be good at expressing his ideas both verbally and in writing; and
- o have a capacity for resolving interdepartmental conflicts.

In summary, support can be enhanced through information sharing and maximizing the actual and perceived participation of the affected persons and organizations in the planning and change process. This means that people must not only be a part of the planning effort, but also consciously aware of their participation and contribution.

#### 7.4 Worksheet: Facilitating Change In Your Community

Use the following questions to help facilitate change in your community and/or department.

1. List those individuals and/or groups of individuals who will be most affected by the proposed change(s).

For each person/group on the list, check the column that you think best describes their initial attitude toward the change.

- |                 |               |
|-----------------|---------------|
| 1 - Destructive | 3 - Uncertain |
| 2 - Threatening | 4 - Positive  |

<u>INDIVIDUAL</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
_____	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___

2. For the above individuals, what can you do to enhance their enthusiasm and support for the proposed changes? For example, what information can you provide, what actions can you take, in what ways can you expand their participation in the change process?

_____
_____
_____
_____
_____
_____
_____

## 8. STRESS IN EMERGENCY SITUATIONS

### WHAT IS STRESS?

Stress is pressure or demands exerted on an individual which affect his or her behavior. Stress causes the body to respond in various kinds of ways; a person's physical, emotional, and intellectual reactions are all influenced by stress.

People differ considerably, both in the way they handle stress and in terms of the situations they find more or less stressful. One individual will lose his temper at the slightest delay in traffic; another will work best under tight deadlines with conflicting demands. However, while tolerance for stress may vary widely among individuals, there is a point for virtually everyone where too much stress makes him/her dysfunctional.

Everyone deals with stress in life. Financial pressures; worries over children, schools, drugs, crime; and interpersonal relationships are all common sources of stress. However, in addition to these everyday pressures, fire chiefs face special stresses associated with being in public life. The scope of responsibility for a public official is very large; he/she must handle increasing demands for service with existing or shrinking resources for a huge constituency -- the entire community. Merely being in the public eye is a source of stress in itself. Privacy is often lacking, and family needs frequently are put aside to meet professional demands. Finally, a fire chief bears an additional burden: the heavy responsibility associated with protecting life and property.

### STRESS AND DISASTERS

The most stressful situations generally fall into two categories: change and threat.

**CHANGE:** Any change involves loss. It means giving up something and embarking on something new. Even when the change is seen as positive, when what is new is desired and anticipated with pleasure -- for example, starting a new job or buying a new home -- it is still stressful. Something familiar is being left behind.

**THREAT:** Threat is the fear of what might happen. Feeling threatened is worrying about an eventuality that may or may not occur -- for example, missing a deadline, losing a job, not achieving some personal goal. Of course, fear is stressful, in itself.

It is easy to see why disasters and emergency situations are so stressful; they are virtually always characterized by change and threat. Large scale emergencies carry with them a sense of disorder and flux. Fears run the gamut from specific concerns over safety and security to a vague sense of worry that the system won't be able to cope and life won't be the same after the emergency is over.

The relationship between the provider of an emergency service and the recipient, or "victim", can also be a source of stress. Each has expectations of himself and of the other, and to the extent that these are not met, stress often results. These relationships tend to go through four phases (with much overlap between the phases) based on the emotional states of those involved.\*

1. **HEROIC PHASE:** This period occurs during and immediately following the disaster. Emotions are strong; people are called upon to respond with heroic action to save lives and property, both their own and others; altruism is strong. Family groups, neighbors, and emergency teams are important resources.
2. **HONEYMOON PHASE:** This period lasts about 1 week to 3-6 months after the disaster. People have a strong sense of having shared a dangerous, catastrophic experience and survived, even though having suffered loss. Government and other officials provide support and encouragement and promise all kinds of future help. Existing and disaster-related community groups are important resources.

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\* Source for the remainder of this section is TRAINING MANUAL FOR HUMAN SERVICE WORKERS IN MAJOR DISASTER, National Institute of Mental Health, U.S. Department of Health and Human Services.

3. DISILLUSIONMENT PHASE: This period lasts from 2 months to 1-2 years. Strong feelings of disappointment, anger, and bitterness occur when there are delays or failures and promises of aid are not fulfilled. Outside agencies may pull out. Existing community groups may weaken or become less helpful. The feeling of "shared community" is lost as individuals concentrate on rebuilding their own lives and solving their own problems.
4. RECONSTRUCTION PHASE: This period lasts for several years after the disaster. Victims have come to realize that they will need to rebuild their own lives and businesses, largely by themselves, and have accepted the responsibility. New construction and the development of new plans and programs serve to reaffirm the victim's belief in his own capability. If these are delayed, serious emotional problems may result. Community groups with a long-term investment in the community are important in this phase.

#### DISASTER RELIEF WORKERS AND "BURNOUT"

Workers in all phases of disaster relief expose themselves to unprecedented personal demands in their desire to help meet the needs of the victims. Many workers devote all of their time to the disaster-related tasks, particularly during and immediately following the emergency. As order returns, some workers return to their regular jobs, but still attempt to continue their disaster work.

Sometimes, even when replacements are available, workers refuse relief and push themselves beyond their effective limits. While such action might seem altruistic and commendable, in reality, the tired and inefficient worker can be more of a liability than an asset in rescue and recovery activities. In a disaster, workers need all the strength and energy they can muster. They must have clear heads to make critical and sometimes lifesaving decisions. They must be able to cope with both the physical consequences of the disaster and the psychological needs of its victims.

The result of overwork is the "burn-out syndrome" -- a state of exhaustion, irritability, and fatigue which decreases the disaster worker's efficiency and effectiveness. The best way to forestall the burn-out syndrome is to anticipate it.

Burnout has four groups of symptoms:

THINKING: Mental confusion, slowness of thought, inability to make judgments or decisions, loss of ability to conceptualize alternatives or to prioritize tasks, loss of objectivity in evaluating one's own level of functioning, etc.

PSYCHOLOGICAL: Depression, irritability, anxiety, hyperexcitability, rage reactions, etc.

PHYSICAL: Physical exhaustion, loss of energy, gastrointestinal distress, appetite disturbances, sleep disorders, hypochondria, etc.

BEHAVIORAL: Hyperactivity, excessive fatigue, inability to express one's self verbally or in writing, etc.

The earlier the above symptoms are recognized, the better. All workers should be made aware of these symptoms, in order to recognize the beginnings of burnout, both in themselves and in their co-workers. A worker suffering from burnout should be relieved of his/her duties for a short period of time. These individuals often feel guilty about leaving their work. Therefore, they should also be reassured that they can return as soon as possible and that their contribution to the disaster effort will be greatly improved as a result of their short time off.



## COPING WITH STRESS

The key to coping with stress is to understand that the responsibility for doing so rests with each individual. Basically, coping with stress involves a reorientation of physical and psychological patterns, in both professional and personal life. While there are far too many stress reduction techniques to discuss here, a few examples are:

- o Regular exercise
- o Proper diet
- o Pursuit of outside interests or hobbies
- o Meditation and other relaxation techniques
- o Development of a support group of friends and/or family
- o Adequate free time and vacations
- o Psychological therapy.

## 9. WORKING RELATIONSHIPS

### 9.1 Overview

A fire department generally works with other local and state organizations on major incidents and disaster situations. Some examples are, with other fire departments for mutual assistance; with the police department for crowd and traffic control; with the hospital for emergency medical care; with emergency preparedness personnel in evacuation planning; and with management officials for overall direction. Thus, there will be working relationships associated with fire department participation in disaster operations -- and these relationships are fundamental to effective and efficient operations. The working relationships can be good, bad, or nonexistent, depending on previous experiences and the effort applied to developing and maintaining good relationships.

The Fire Chief is encouraged to define those local/state, government/private organizations and personnel with which the department will interface during any of the phases of emergency management, and immediately begin to establish and maintain good working relationships. A good working relationship involves mutual respect and confidence.

The remainder of this section discusses several of the more important working relationships faced by every fire department in the Nation:

- a) Working with other fire departments (mutual aid agreements) - 9.2
- b) Working with law enforcement agencies - 9.3
- c) Working with civil defense - 9.4
- d) Working with state and local executive officials - 9.5
- e) Working with the media - 9.6

### 9.2. Mutual Aid Agreements

The U.S. fire service has long been a leader in the use of "mutual aid" and, more recently, "automatic aid". In fact, fire departments have probably planned, trained, and operated together (on emergency incidents) more than any other type of local government agency. This close cooperation is due to the fact that no community can afford to retain all of the

resources that might be needed for the largest incidents. Through mutual aid, each community maintains the resources needed for day-to-day emergencies, with the extra help needed for major incidents coming from one or more neighboring fire departments.

This mutual-benefit concept was expanded in the early 1970's with the addition of "automatic-aid". Automatic aid differs from mutual aid in that it is designed for use with day-to-day emergencies, as well as major incidents. Under automatic aid, a fire department dispatches a unit automatically in response to an alarm -- i.e., without receipt of a specific request for assistance. The "first-due" unit might even be from another fire department, provided under automatic aid.

Automatic aid operations frequently occur where the unit from one department is actually closer to a portion of another jurisdiction. For example, Station 1 of Jurisdiction A is closer (has a shorter response time) to a section of Jurisdiction B than any station in Jurisdiction B; and Station 3 of Jurisdiction B is closer to a section of Jurisdiction A than any station in Jurisdiction A. Thus, it is advantageous for these two jurisdictions to use automatic aid to achieve the best level of service to both jurisdictions.

There are obviously many benefits associated with automatic and mutual aid; however, there is an additional benefit for effective overall emergency management:

"the use of mutual and automatic aid for day-to-day incidents and major, but routine, emergencies will help to establish working relationships which could be of significant value in the event of a community-wide disaster."

This additional benefit is so important that the National Advisory Board for the development of the Integrated Emergency Management System (IEMS) recommended that the use of automatic and mutual aid be promoted as a building block in a community's emergency management program.

In addition to benefits, there are also "potential problems" which must be addressed in developing mutual/automatic aid agreements. One of the more important issues is that the aid must be truly "mutual"; that is, all participating jurisdictions must benefit more or less equally.

Inequitable or "Robin Hood" agreements (where the rich jurisdiction subsidizes the less affluent jurisdiction) frequently lead to dissatisfaction. In some cases, it is cost-effective for the jurisdiction getting the larger share of the benefit to help balance the arrangement through an annual payment to the jurisdiction providing most of the aid.

Other issues to be addressed include:

- a) liability; - e.g., what happens if the assisting fire department is included in a law suit?
- b) damage to, or loss of, equipment; - e.g., who pays for the repair or replacement of a pumper damaged during a mutual aid operation in another jurisdiction?
- c) protection of fire department employees while working in another jurisdiction; - e.g., are the worker's compensation and retirement benefits valid if a fire fighter is injured while working in a different jurisdiction?
- d) personnel and equipment support; - e.g., who provides for food, fuel, and repairs while working in a different jurisdiction?
- e) common standards and procedures; - e.g., do personnel of the various jurisdictions use similar procedures and have compatible skill levels? [Of course, the use of mutual/automatic aid resources will be more effective and efficient if standard personnel skill requirements (by position) and operational procedures have been adopted. This standardization is especially important for emergency medical services where certification requirements could legally preclude the use of mutual aid units.]
- f) procedures for provision of mutual/automatic aid; - e.g., when and how is the assistance provided? [Thus, the agreements should include detailed procedures for:
  - a) requesting assistance, including defining who has the authority to "request" and "commit" resources;
  - b) establishing what types (and quantities) of resources are needed;
  - c) stating where (to whom) and when the resources are to report;
  - d) precluding "self-assignment" wherein "without permission" units change their assignments while enroute;

e) not responding until requested (except for automatic aid); and

f) ensuring maintenance of adequate personnel levels.

Automatic/mutual agreements may be formal or informal, written or oral, depending upon the requirements and constraints of a particular region. In some cases, master agreements are established at the state level (e.g., California and New York).

While these potential problems are important, they generally are not insurmountable -- as evidenced by the thousands of mutual/automatic aid agreements in effect today. All fire departments are encouraged to participate in mutual/automatic aid agreements, to the degree feasible, to the benefit of day-to-day operations as well as for disaster situations.

### 9.3 Working with Law Enforcement Agencies

Most fire departments have extensive working relationships with law enforcement agencies (e.g., police department, sheriff's office, and highway patrol). In fact, fire departments probably work more closely, and more often, with law enforcement than any other type of government agency. A study of fire department working relationships\* identified 58 functional areas involving joint fire-law enforcement activities, including:

- a) crowd and traffic control
- b) sharing of facilities (e.g., communications/dispatch center)
- c) evacuation
- d) situation monitoring and assessment
- e) damage assessment
- f) rescue
- g) bomb disposal
- h) arson investigation
- i) public alert warning and general information

All of these activities can be associated with disaster operations.

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\* A Study of Working Relationships Between Fire Departments and Other Municipal Services, October 1980, Ryland Research, Inc., Santa Barbara, CA

With this extensive set of related fire-law enforcement disaster activities, it is important for the two departments to conduct joint planning and training, and then maintain good communications and coordination during an incident.

#### 9.4 Working with Civil Defense

A community's civil defense organization may be called civil preparedness, disaster preparedness, emergency preparedness, or emergency management. Whatever the title, there are significant working relationships between this organization and the fire department. In fact, the agency is frequently a part of the fire department (the IAFC emergency preparedness survey indicated that more than 25% of the responding fire chiefs were also the emergency preparedness directors).

Typical working relationships between fire and civil defense agencies include:

- a) disaster planning
- b) training/exercise
- c) communications/dispatch
- d) situation monitoring and assessment
- e) damage assessment
- f) public alert/warning and general information
- g) acquisition of resources needed during an emergency
- h) citizen training (e.g., first aid and CPR)
- i) provision of additional personnel such as support or law enforcement personnel, and fire and rescue teams.

Considering these and other functional areas in which the fire and civil defense agencies must work together (throughout all four phases of comprehensive emergency management), it is important that close working relationships be developed and maintained. Sometimes, this relationship is impaired because of conflict over the role of the emergency preparedness coordinator; i.e., the role of "coordinator" vs. "Command".

To assist in resolving this issue, the IAFC and the National Coordinating Council on Emergency Management (NCCEM), previously the U.S. Civil Defense Council (USCDC), signed a Statement of Understanding which reads as follows:

"For the purpose of the agreement, and because the person charged with coordinating local government's response to disasters on behalf of the chief executive officer is known by many titles, we will refer to that person as emergency management coordinator (hereafter EMC).

"Whereas the International Association of Fire Chiefs, Inc. (hereafter referred to as IAFC) representing fire chiefs internationally:

"and the United States Civil Defense Council (hereafter known as USCDC) representing local emergency management coordinators from throughout the United States, find many items of mutual concern that would serve to improve and coordinate emergency management in the nation, hereby set forth this Statement of Mutual Understanding.

"USCDC acknowledges the fire service as the first responder to many emergencies. The chief executive officer would expect the fire service to perform and carry out their mission on day-to-day or routine incidents. When an emergency begins to take on other than normal day-to-day activity, or exceeds the normal handling capabilities of the fire department, and more resources and coordinating becomes essential, the appropriate local emergency management coordinator shall be notified, and will respond per predetermined plans or requests of the fire chief and/or the chief executive officer. Such incidents could include, but not be limited to, major conflagrations, medical disasters, hazardous materials incidents, natural disasters, etc.

"IAFC recognizes the need for coordination of resources for major incidents and the EMC to be knowledgeable in emergency management coordination. The fire chief also recognizes the EMC as the chief resource person and the USCDC recognizes the fire chief as the operational incident commander.

"The emergency management coordinator will:

1. coordinate services on behalf of the chief executive officer of the government entity;
2. if necessary, contact the state emergency management agency and work with that agency to secure assistance of other state departments and federal agencies;
3. if necessary, secure the assistance of voluntary and service organizations, such as the American Red Cross, Salvation Army, etc.; and
4. coordinate the preparation of the disaster plan, including the periodic testing and updating.

"The fire chief will:

1. manage fire suppression and prevention, hazardous incidents, and, where applicable, pre-hospital phase emergency medical services in accordance with approved plans;
2. advise if mass evacuation is required;
3. be an active participant at meetings pertaining to disaster management planning, and plan his appropriate actions as concerns fire control, suppression, prevention, evacuation, hazardous incidents, and EMS, etc.;
4. be appraised and maintain data of latest developments and make recommendations for disaster plan changes through the appropriate community channels as directed by the community plans; and
5. be a member of the policy/planning group in the preparation of disaster plans.

"This agreement has been executed in the interest of establishing better emergency management coordination between fire chiefs and emergency management coordinators for the safety and well-being of the citizens.

"This Statement of Understanding has been approved by the Board of Directors of the IAFC and the Executive Board of the USCDC and the Presidents have been authorized by their respective boards to sign said agreement and make such agreement known to their respective memberships."

#### 9.5 Working with State and Local Executive Officials

All fire department activities are related to working relationships with executive officials (e.g., city manager, mayor, council member, county supervisor, etc.). These relationships involve establishing policy, making operational decisions during a disaster, and obtaining the department's annual budget allocation for emergency preparedness activities.

Thus, these officials generally control a community's emergency management program in the most fundamental way (i.e., policies and resources); and, in some cases, even serve as the legally designated emergency



preparedness directors. Yet, a number of case studies\* have revealed an alarming lack of interest in emergency preparedness on the part of these officials -- until a disaster occurs.

The fire chief, therefore, has a challenge to develop and maintain executive-level interest and participation in the fire department's (or overall community's) disaster preparedness program. Experience indicates that it is possible to achieve this interest and participation.

First, it is important for these officials to understand the hazards faced by the community and the potential consequences of inadequate preparedness (including personal, as well as governmental, liability). There are a number of examples in which city officials developed a positive approach to emergency management, often participating in FEMA/IAFC workshops, with the corresponding explanation, "I never fully understood the situation before."

Support is not enough, executive officials should also be involved in every phase of the emergency management program: mitigation, preparedness, and recovery. It is especially important for these officials to have specific disaster responsibilities, including a designated facility to respond to, and work out of, during the operational period.

#### 9.6 Working with the Media

At a disaster, the fire chief has a job to do, and so do the media. It is the fire chief's responsibility to assist in mitigating the disaster and its effects by commanding and coordinating the community's resources. It is the media's job to report on the progress of the disaster and how it is being handled by the fire chief and the resources at-hand.

These functions need to be mutually inclusive, and, above all, they need not be the cause of conflict between the fire chief and the media. The fire chief should realize that, used properly, the media can be valuable members of the community's emergency management program.

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\* For example: Local Government Disaster Protection Final Report, International City Management Association, Feb. 1981, Washington, D.C.

It is vital for the fire chief to understand that most members of the media are competent professionals and that they will do their job, which is gathering information, with or without his cooperation or the cooperation of those under his command. If the media know, from past experience, that they will receive no cooperation, they will be all over the disaster scene, sometimes interfering with the work of emergency crews, and sometimes reporting inaccurate and/or misleading information. In certain instances, the dissemination of such information can lead to a worsening of the disaster situation. On the other hand, accurate public information delivered through the media can be vital to help assure the minimum loss of life and property during a disaster.

If reporters and photographers have confidence in the fire department's public information operation, they will be more willing to follow the information officer's instructions because they know that, more often than not, he will provide the most accurate information and the best visual opportunities. A checklist for working with the news media is included at the end of this section.

The fire chief should establish the department's policy towards the public information function, but should not attempt to function as his own public information officer. Rather, he should appoint another to function in that capacity. Thus, the public information officer, by coordinating the information dissemination process, frees the fire chief to make the command decisions necessary during the course of any disaster. Eventually, however, representatives of the news media will insist on talking with the CAO, fire chief, police chief, elected officials, etc., and provision must be made for such interviews to be held at the appropriate time and place.

The public relations officer should distribute information as quickly as possible, following the basic guidelines of any public information officer -- be available, be honest, be personable, and be accurate. An open and informative approach to the media not only will help the department, the community, and the general public, but, most importantly, will assist in the mitigation of the disaster.

During a disaster, information can be delivered in three stages -- pre-disaster, disaster, and post-disaster.

PRE-DISASTER PERIOD: This stage recognizes that an emergency or disaster is probable and that initial preparedness measures are prudent. The information provided includes:

- o a description of the threat and its characteristics;
- o identification of evacuation routes;
- o location of shelter facilities and assistance centers; and
- o other types of information or preparedness instructions such as protection of property, food, water, and fuel supplies.

DISASTER PERIOD: Information and instructions sent out at this stage concentrate on actions essential to survival, health, and safety of people in the disaster area. This information should include:

- o the description of affected areas and any area likely to be subjected to secondary hazards; and
- o the location of emergency shelters and feeding facilities, assistance centers, and emergency medical care facilities.

POST-DISASTER PERIOD: This stage begins when the emergency is over and continues until all recovery activities are complete. Information disseminated should deal with:

- o continuing hazards, such as unsafe buildings, fallen power lines, and health hazards;
- o the types of assistance available to communities and disaster victims; and
- o the location of disaster assistance centers.

The enormity of the public information officer's task should not be underestimated. The disastrous fire at the MGM Grand Hotel in Las Vegas provided some excellent examples of the number of the information officer's responsibilities.

Before the fire was through its first half hour, dozens of local reporters were swarming over the fireground. As soon as the wire services began reporting the incident, media from neighboring states moved toward Las Vegas. By noon, close to 200 reporters were on-the-scene. The scramble for information only increased during the post-disaster period. In the first week following the fire, approximately 30 calls per hour were directed to the public information officer and his office became the media headquarters.

The public information officer has an enormous job at any disaster. The fire chief must realize this and assign the position a high priority.

#### CHECKLIST FOR WORKING WITH THE MEDIA

- o As soon as practical, establish a public information area near the disaster scene in a smaller incident, or in a central location at a larger disaster. The effective establishment of this area will, as previously discussed, relieve command officers of the need to deal directly with the media during critical command stages and will provide and structure the standard information the media will require to report the situation accurately.
- o Because many different agencies usually are involved in a disaster, it is important that the public information personnel from those agencies coordinate their efforts.
- o Have a basic information form that can be filled out and distributed to the media on-the-scene.
- o Make sure that all reporters gather in the public information area. If you leave the area, ask them to remain, assuring them that you will return with additional information.
- o If you wish, allow the media to take photographs and videotape footage while you are gathering information, but arrange to meet them in the public information area with additional facts.
- o Keep media deadlines in mind and make every attempt to get them the information they need to meet those deadlines. If they must return to their headquarters to meet those deadlines, obtain phone numbers and call them with additional information as soon as it is available.
- o Add anything to the basic information that will enhance the story. Examples of this are an extremely hazardous situation, a rescue, or a person or company that did an outstanding job.

- o Assist in arranging news conferences, briefings, interviews and media tours of areas that have been affected by the disaster (motels are generally excellent locations for press conferences because they have meeting rooms, telephones, and food service, and are usually in a central location).
- o The information officer and area should have a specific radio designation, e.g., "information."
- o Ensure that all members of the media wear proper protective clothing when entering the disaster area.
- o Advise the media to leave an area if their safety is threatened or if they are interfering with emergency operations, but ask them to leave in a positive manner and avoid confrontation.

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\* Material in this section is based, in part, on:

Emergency Operations Plan, State of New Hampshire, May 1978

Information Officer's Procedures Guide, Multi Agency Coordination System, FIREScope Publication, August 1, 1980.

Standard Operating Procedures, Phoenix (Arizona) Fire Department, March 1, 1981.

Acknowledgements also to the following public information officers:

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## 10. MANAGING KEY OPERATIONS

### 10.1 Introduction

This section presents key issues which should be considered in planning and managing fire department disaster response functions which are generally not associated with day-to-day routine activities. The listed functions were selected by members of IAFC's Emergency Preparedness Committee as being of particular interest to the fire service.

### 10.2 Recall of Personnel

1. Develop detailed written recall procedures
  - a. criteria for recall
  - b. authority for initiating a recall
  - c. identification of whom to recall (e.g., considering response distances)
  - d. criteria for selective recall based upon need (e.g., for paramedics only)
  - e. location of staging areas (generally away from the fireground)
  - f. procedures for obtaining safety equipment
  - g. procedures for safe response to staging area (e.g., without exceeding speed limits)
  - h. designation of person to report to
  - i. definition of recall communications system
  - j. cost considerations
  - k. utilization of mutual aid in lieu of recall, where possible
  - l. assignment of personnel to accomplish each step in the recall process
2. Test Recall Procedures
3. Revise as necessary
4. Disseminate procedures to appropriate personnel
5. Conduct training in Recall Procedures

6. Critique and revise procedures after each use.

### 10.3 Limited and Mass Evacuation

1. Define who has the authority to order an evacuation
  - a. by size of area (e.g., engine company officer has authority to evacuate a single property, but how about a block or an entire community?)
  - b. by type of incident (potential or actual)
  - c. by expected length of evacuation (e.g., hours/days)
2. Establish criteria for ordering an evacuation
  - a. potential incidents, by type
  - b. actual incidents, by type
  - c. short-/long-term
3. Establish procedures for conducting an evacuation
  - a. potential incidents, by type
  - b. actual incidents, by type
  - c. short-/long-term
4. Define area to be evacuated
  - a. initially
  - b. on a contingent basis
5. Establish procedures and communications links for coordinating with law enforcement agencies
6. Identify host locations and facilities (pre-selected)
  - a. interim staging areas
  - b. ultimate destinations
7. Identify transportation needs and methods
  - a. routes
  - b. vehicles
8. Provide for transporting non-ambulatory citizens
9. Provide for relocation of fire department support services (e.g., fuel, food, etc.)
10. Consider "hardening" critical facilities to preclude need for relocation

11. Establish procedures (and assignments) for notifying residents to evacuate
12. Establish procedures for notifying and reuniting families of fire department personnel
13. Prepare "canned" press releases and public announcements for use if an evacuation is required
14. Complete detailed planning of the public information function in cooperation with representatives of the news media
15. Establish special procedures for: persons on life support equipment, medicine, eye glasses, pets, congregate care facilities (including hospitals)
16. Test evacuation procedures
17. Conduct training in the evacuation process
18. Revise procedures as necessary
19. Critique and revise procedures after each use.

#### 10.4 Relocating Emergency Response Units

1. Designate types and locations of units
2. List potential hazards faced by community
3. Identify potential for damage (or blockage) of units (e.g., station collapsing on apparatus, station located in flood plain, etc.)
4. Estimate probable warning time associated with each type of incident (e.g., zero time for an earthquake; several days for a hurricane)
5. Determine action to be taken for each type of incident (e.g., move apparatus out of station, relocate to host area, etc.)
6. Define communication channels for receipt of warning
7. Designate assignments for taking protective action
8. Test relocation process
9. Revise procedures as necessary
10. Conduct training in process
11. Critique and revise procedures after each use.



## 10.5 Establishing Command Posts

[These command post functions are based upon the National Interagency Incident Management System (NIIMS) Incident Command System (ICS).]

1. Establish command post activation procedures
2. Establish command post deactivation procedures
3. Establish the following general functions:
  - a. Incident Command
  - b. Operations (responsible for management of all operations directly applicable to the primary mission)
  - c. Planning (responsible for the collection, evaluation, dissemination, and use of information on the development of the incident and status of resources)
  - d. Logistics (responsible for providing facilities, services, and material in support of the incident)
  - e. Finance (responsible for all financial and cost analysis aspects of the incident).
4. Establish safety, public information, and interagency liaison as special activities reporting to the incident commander
5. Designate staging areas and assign a manager to each area
6. Establish resource status (i.e., location and availability of resources) and situation status (i.e., location and magnitude of incident) units within the planning function
7. Establish a documentation unit (within planning) to maintain a record of all incident activities
8. Establish the following functions within logistics
  - a) communications
  - b) medical
  - c) food
  - d) supply (personnel, equipment, and supplies)
  - e) facilities (sleeping, sanitation, showers, lights, etc.)
  - f) ground support (transportation, fueling, maintenance, and traffic plan)
9. Require that all assigned personnel receive a briefing and review their duties before taking action.

#### 10.6 Task Force (or Strike Team) Assignments

1. Define types of task forces needed (e.g., structure, wildland) and their composition
2. Establish criteria for selecting staging areas (e.g., major highway intersections, sufficient parking area, sanitation facilities, away from fire ground)
3. Select potential staging sites
4. Assign a staging area manager to each site utilized
5. List potential sources for task force resources (use several different agencies so as to not deplete any one agency)
6. Establish authority and procedures for requesting resources
7. Define communication links for requesting resources
8. Develop protocols so that personnel know to whom they are responsible, from whom they are to take orders, and the extent of authority of superiors.
9. Provide training for task force commanders (consider regional certification)
10. Establish form-up procedures (i.e., form into task force prior to arrival on the fire ground)
11. Provide briefing, assignment, and safety information while at staging area
12. Arrange for:
  - a. communications between task force members
  - b. relief procedures
  - c. feeding/sleeping/sanitation, etc.
  - d. fuel, maintenance
  - e. record keeping
13. Test task force procedures
14. Conduct training in task force procedures
15. Critique and revise procedures after each use.

### 10.7 Continuing Planning

As stated previously, "the planning process should never stop." The first step in continuing planning was treated as a separate item earlier because it is an extremely important and difficult item with which to deal. Additional steps in continuing plan improvement are:

1. Incident Reviews and Critiques
2. Exercises
3. Training Courses.

Incident reviews and critiques should be held after an actual disaster. The basic idea is to find out if anything has been overlooked. Suggestions on critical review follow.

1. The person in charge of plan updating should also be responsible for conducting the incident review.
2. Let the dust settle before conducting a review and wait until at least a week has passed to give people a chance to get minor irritations out of their systems and recover physically and mentally.
3. Conduct criticism and incident review meetings when everyone in attendance is capable of giving and accepting truly constructive criticism. Otherwise, the meeting may degenerate into accusations, confrontations, recriminations, and timid silences, particularly if the meeting is disorganized. (And that is exactly when feedback is most needed -- after things have become chaotic.)
4. Second, a questionnaire letter to as many people involved in the disaster as possible for comments and suggestions. A self-addressed mailing form should be included to keep responses confidential.

5. A failure to answer the planner's request for comments can, in itself, indicate a problem. A follow-up phone call should be made.
6. Look for true plan deficiencies: steps overlooked, improperly identified, or which simply did not work in the manner intended.
7. Many personnel or departmental deficiencies can be pointed out in response to the request. Failure to communicate, slowness to respond, not knowing the job, etc., are problems, but not planning problems. Handle each problem separately, or informally discuss the problem with the appropriate party. Do not compound problems by sending out retaliatory letters.
8. If a true deficiency is uncovered, get the correction process started immediately. Request that the appropriate person rewrite the problem section or have it revised by the planner.

## 11. SOURCES OF FUNDING AND OTHER ASSISTANCE

### 11.1 Overview

It is true that the overall responsibility for community emergency management resides at the local government level. Fortunately, local governments do not need to rely solely on their own resources to meet these responsibilities. Funding and other assistance, with respect to all four phases of disaster management, are available from a number of different sources and in a variety of different forms. Training, technical expertise with respect to handling specific hazards, management advice and assistance, computer time, equipment, information and, of course, money are all examples of help that can be provided to strengthen an emergency management program.

The community itself can be a resource. Local businesses, volunteer organizations and agencies, and individual citizens can and do contribute money, time, and expertise in their localities. The HANDBOOK discusses this topic throughout Part Two, especially in Section 3.1.4. The purpose of this chapter is to identify non-community based sources of assistance, the most important of which are state and federal government programs.

### 11.2 State and Federal Government Assistance

State and federal government programs are a major source of support for community emergency management. In 1982, the President signed Executive Order 12372, which restructured the way in which the federal government interacts with state and local governments for purposes of financial and other assistance. The new policies allow the states, in consultation with their local governments, to design their own review processes and select those financial and other assistance programs which reflect their own priorities. This means that, in many cases, applicants for grants or other assistance may need to meet certain state requirements before federal agencies can take action on an application. For information on the process in your state, you should contact the office or official designated as the point of contact. A list of these contacts entitled, "State Officials Responsible for Disaster Operations", is provided at the end of this section.

The best source of information on federal assistance is THE CATALOG OF FEDERAL DOMESTIC ASSISTANCE. The document is published annually and lists programs, projects, services, and activities provided, and administered, by the federal government. The publication is user-oriented; each program is described in terms of objectives, eligibility requirements, application and reporting procedures, use and restrictions, and other items of interest to a potential user of the program. The CATALOG is published by the Office of Management and Budget (OMB) and is widely distributed to state and local government agencies and offices. Individual copies may be obtained from the Government Printing Office, Superintendent of Documents, Washington, D.C., 20402.

OMB also operates the Federal Assistance Program's Retrieval System (FAPRS), a computerized question-answer system designed to provide rapid access to federal domestic assistance program information. The potential applicant queries the system, supplying specific information about itself and the type of assistance required, and FAPRS responds with information on programs which may be appropriate. States have designated access points where FAPRS searches may be requested. For further information on FAPRS, the location of the nearest FAPRS access point, a list of timesharing companies from which interested persons may arrange for direct access to the system, contact the Federal Program Information Branch, Room 6001, Budget Review Division, Office of Management and Budget, 726 Jackson Place, NW, Washington, D.C. 20503.

Program information from the CATALOG is also available on machine readable magnetic tape and microfiche. For information on how to use and obtain these sources, contact the National Technical Information Service, Department of Commerce, 5285 Port Royal Road, Springfield, Virginia, 22151.

The CATALOG presents programs in two major types of groupings: in a functional index and by federal agency. It is important to keep in mind that assistance may be available through a program or agency that is not specifically labeled "disaster". This is especially true with respect to mitigation activities you might want to undertake, where, for example, community development programs might be a potential source of help. Thus,

you should review the CATALOG carefully to identify programs which you can utilize in a variety of ways in broad support of your community's emergency strategy.

The following material which lists, summarizes, and describes major sources of federal and other assistance comprises the remainder of this section.

11.3 Listing of Disaster Prevention and Relief programs  
(from several different federal agencies)

11.4 Summary of FEMA Programs

11.5 FEMA Program's Applicant Eligibility Summary

11.6 Capsule Descriptions of FEMA Programs

11.7 FEMA Offices

11.8 State Officials Responsible for Disaster Operations

See also Appendix B for additional sources of information and assistance.

## 11.3 FEDERAL PROGRAMS FOR DISASTER PREVENTION AND RELIEF

### EMERGENCY PREPAREDNESS, CIVIL DEFENSE

- 10.054 Emergency Conservation Program (C)
- 11.401 Nautical Charts and Related Data (J,K,L)
- 12.400 Military Construction, Army National Guard (B)
- 13.676 Surplus Property Utilization (H)
- 14.139 Mortgage Insurance—Rental Housing in Urban Renewal Areas (F)
- 14.219 Community Development Block Grants/Small Cities Program (B)
- 81.028 Radiological Emergency Assistance (J,K,L)
- 83.101 Urban Property Insurance (G)
- 83.400 Emergency Management Institute—Student Expense Program (B,M)
- 83.401 Emergency Management—Architect/Engineer Student Development (M)
- 83.403 Training and Education Field Deployment (A,B,M)
- 83.406 Training and Fire Programs Educational Program (M)
- 83.500 General Research, Development, and Demonstration Activity (B)
- 83.503 Emergency Management Assistance (A)
- 83.504 State and Local Maintenance and Services (B)
- 83.505 State Disaster Preparedness Grants (B)
- 83.506 Earthquake and Hurricane Preparedness Planning Grants (B)
- 83.508 Radiological Systems Maintenance (B,J)
- 83.509 National Shelter Survey (J)
- 83.510 Shelter Development (K)
- 83.511 State Radiological Defense Officers (B,J)
- 83.512 State and Local Emergency Operating Centers (B)
- 83.513 State and Local Warning and Communication Systems (B)
- 83.514 Population Protection Planning (B)
- 83.515 Emergency Broadcast System Guidance and Assistance (B)
- 83.516 Disaster Assistance (B,I,J)
- 83.517 Electromagnetic Pulse (EMP) Technical Support (J,K)
- 84.040 School Assistance in Federally Affected Areas—Construction (B)
- 84.041 School Assistance in Federally Affected Areas—Maintenance and Operation (A,B)

### FLOOD PREVENTION AND CONTROL

- 10.054 Emergency Conservation Program (C)
- 10.416 Soil and Water Loans (F)
- 10.418 Water and Waste Disposal Systems for Rural Communities (B,E)
- 10.419 Watershed Protection and Flood Prevention Loans (F)
- 10.423 Community Facilities Loans (F)
- 10.901 Resource Conservation and Development (B,K)
- 10.902 Soil and Water Conservation (K)
- 10.904 Watershed Protection and Flood Prevention (B,K)
- 10.906 River Basin Surveys and Investigations (J,K)
- 11.300 Economic Development—Grants for Public Works and Development Facilities (B)
- 11.304 Economic Development—Public Works Impact Projects (B)
- 11.421 Coastal Energy Impact Program—Formula Grants (A)
- 12.101 Beach Erosion Control Projects (J)
- 12.102 Flood Control Works and Federally Authorized Coastal Protection Works, Rehabilitation (J)
- 12.103 Flood Fighting and Rescue Operations, and Emergency Protection of Coastal Protective Works Federally Authorized (J)
- 12.104 Flood Plain Management Services (K,L)
- 12.105 Protection of Essential Highways, Highway Bridge Approaches, and Public Works (J)
- 12.106 Flood Control Projects (J)
- 12.108 Snagging and Clearing for Flood Control (J)
- 15.503 Small Reclamation Projects (B,E)

- 15.505 National Water Research and Development Program (B)
- 83.100 Flood Insurance (G)
- 83.501 State Assistance Program (B)
- 83.502 Acquisition of Flood-Damaged Structures (H)
- 83.505 State Disaster Preparedness Grants (B)
- 83.506 Earthquake and Hurricane Preparedness Planning Grants (B)

### EMERGENCY HEALTH SERVICES

- 13.228 Indian Health Services—Health Management Development Program (B)
- 13.283 Centers for Disease Control—Investigations and Technical Assistance (J,K,L,M)
- 20.600 State and Community Highway Safety (A)
- 66.507 Toxic Substances Research Grants (B)
- 81.028 Radiological Emergency Assistance (J,K,L)
- 83.406 Training and Fire Programs Educational Program (M)
- 83.505 State Disaster Preparedness Grants (B)
- 83.506 Earthquake and Hurricane Preparedness Planning Grants (B)
- 83.516 Disaster Assistance (B,I,J)

### DISASTER RELIEF

- 10.052 Cotton Production Stabilization (D)
- 10.054 Emergency Conservation Program (C)
- 10.055 Feed Grain Production Stabilization (D)
- 10.058 Wheat Production Stabilization (D)
- 10.065 Rice Production Stabilization (D)
- 10.404 Emergency Loans (F)
- 11.401 Nautical Charts and Related Data (J,K,L)
- 12.102 Flood Control Works and Federally Authorized Coastal Protection Works, Rehabilitation (J)
- 12.103 Flood Fighting and Rescue Operations, and Emergency Protection of Coastal Protective Works Federally Authorized (J)
- 14.119 Mortgage Insurance—Homes for Disaster Victims (F)
- 14.139 Mortgage Insurance—Rental Housing in Urban Renewal Areas (F)
- 14.219 Community Development Block Grants/Small Cities Program (B)
- 20.205 Highway Planning and Construction (A,B)
- 59.003 Physical Disaster Loans (E,F)
- 83.100 Flood Insurance (G)
- 83.101 Urban Property Insurance (G)
- 83.406 Training and Fire Programs Educational Program (M)
- 83.500 General Research, Development, and Demonstration Activity (B)
- 83.502 Acquisition of Flood-Damaged Structures (H)
- 83.505 State Disaster Preparedness Grants (B)
- 83.506 Earthquake and Hurricane Preparedness Planning Grants (B)
- 83.511 State Radiological Defense Officers (B,J)
- 83.514 Population Protection Planning (B)
- 83.516 Disaster Assistance (B,I,J)
- 83.517 Electromagnetic Pulse (EMP) Technical Support (J,K)
- 84.040 School Assistance in Federally Affected Areas—Construction (B)
- 84.041 School Assistance in Federally Affected Areas—Maintenance and Operation (A,B)

The alphabet(s) in parentheses following the program title, shows the type(s) of assistance available through that program. The alphabet codes with accompanying types of assistance are as follows: A—Formula Grants; B—Project Grants; C—Direct Payments for Specified Use; D—Direct Payments with Unrestricted Use; E—Direct Loans; F—Guaranteed/Insured Loans; G—Insurance; H—Sale, Exchange, or Donation of Property and Goods; I—Use of Property, Facilities, and Equipment; J—Provisions of Specialized Services; K—Advisory Services and Counseling; L—Dissemination of Technical Information; M—Training; N—Investigation of Complaints; O—Federal Employment.



## 11.4 SUMMARY OF FEMA PROGRAMS

Program Description *	Financial	Non-Financial	Combine
<b>FEDERAL INSURANCE ADMINISTRATION</b>			
83.100 Flood Insurance (G).....	X		
83.101 Urban Property Insurance (G).....	X		
83.102 Crime Insurance (G).....	X		
<b>TRAINING AND FIRE PROGRAMS DIRECTORATE</b>			
83.400 Emergency Management Institute—Student Expense Program (B,M).....			X
83.401 Emergency Management—Architect/Engineer Student Development (M).....		X	
83.402 Radiological Emergency Response—Training Assistance (K,M).....		X	
83.403 Training and Education Field Deployment (A,B,M).....			X
83.404 Student Stipend Program (C).....	X		
83.405 Training and Fire Programs Educational Program (M).....		X	
83.407 State Fire Incident Reporting Assistance (B).....	X		
83.408 Technical Support Services (J).....		X	
83.409 Reimbursement for Firefighting on Federal Property (C).....	X		
<b>STATE AND LOCAL PROGRAMS AND SUPPORT</b>			
83.500 General Research, Development, and Demonstration Activity (B).....	X		
83.501 State Assistance Program (B).....	X		
83.502 Acquisition of Flood-Damaged Structures (H).....		X	
83.503 Emergency Management Assistance (A).....	X		
83.504 State and Local Maintenance and Services (B).....	X		
83.505 State Disaster Preparedness Grants (B).....	X		
83.506 Earthquake and Hurricane Preparedness Planning Grants (B).....	X		
83.508 Radiological Systems Maintenance (B,J).....			X
83.509 National Shelter Survey (J).....		X	
83.510 Shelter Development (K).....		X	
83.511 State Radiological Defense Officers (B,J).....			X
83.512 State and Local Emergency Operating Centers (B).....	X		
83.513 State and Local Warning and Communication Systems (B).....	X		
83.514 Population Protection Planning (B).....	X		
83.515 Emergency Broadcast System Guidance and Assistance (B).....	X		
83.516 Disaster Assistance (B,I,J).....			X
83.517 Electromagnetic Pulse (EMP) Technical Support (J,K).....		X	

\* The alphabet(s) in parenthesis following the program title, shows the type(s) of assistance available through that program. The alphabet codes with accompanying types of assistance are as follows: A—Formula Grants; B—Project Grants; C—Direct Payments for Specified Use; D—Direct Payments with Unrestricted Use; E—Direct Loans; F—Guaranteed/Insured Loans; G—Insurance; H—Sale, Exchange, or Donation of Property and Goods; I—Use of Property, Facilities, and Equipment; J—Provision of Specialized Services; K—Advisory Service and Counseling; L—Dissemination of Technical Information; M—Training; N—Investigation of Complaints; O—Federal Employment.

Included is a chart to help distinguish programs that provide financial assistance from those providing services and technical assistance, plus those programs that provide both financial and non-financial assistance.

# 11.5 FEMA PROGRAMS APPLICANT ELIGIBILITY SUMMARY

Program Description *	Individual	Local	Nonprofit	State	U.S. Territories	Federal Tribal Governments
83.100 Flood Insurance (G).....		X		X		
83.101 Urban Property Insurance (G).....	X			X	X	
83.102 Crime Insurance (G).....	X					
83.400 Emergency Management Institute—Student Expense Program (B,M).....	X	X		X	X	
83.401 Emergency Management—Architect/Engineer Student Development (M).....	X				X	
83.402 Radiological Emergency Response—Training Assistance (K,M).....		X		X		
83.403 Training and Education Field Deployment (A,B,M).....	X					
83.405 Student Stupend Program (C).....			X			
83.406 Training and Fire Programs Educational Program (M).....			X			
83.407 State Fire Incident Reporting Assistance (B).....		X		X	X	
83.408 Technical Support Services (J).....				X	X	
83.409 Reimbursement for Firefighting on Federal Property (C).....				X	X	
83.500 General Research, Development, and Demonstration Activity (B).....	X	X	X	X	X	X
83.501 State Assistance Program (B).....				X	X	
83.502 Acquisition of Flood-Damaged Structures (H).....	X	X	X	X	X	X
83.503 Emergency Management Assistance (A).....		X		X	X	
83.504 State and Local Maintenance and Services (B).....		X		X	X	
83.505 State Disaster Preparedness Grants (B).....				X	X	
83.506 Earthquake and Hurricane Preparedness Planning Grants (B).....		X		X		
83.508 Radiological Systems Maintenance (B,J).....		X		X		
83.509 National Shelter Survey (J).....		X		X	X	
83.510 Shelter Development (K).....	X				X	
83.511 State Radiological Defense Officers (B,J).....	X			X		
83.512 State and Local Emergency Operating Centers (B).....				X	X	
83.513 State and Local Warning and Communication Systems (B).....				X	X	
83.514 Population Protection Planning (B).....				X	X	
83.515 Emergency Broadcast System, Guidance and Assistance (B).....	X	X	X	X	X	X
83.516 Disaster Assistance (B,I,J).....	X	X	X	X		
83.517 Electromagnetic Pulse (EMP) Technical Support (J,K).....		X		X		

The alphabet(s) in parenthesis following the program title shows the type(s) of assistance available through that program. The alphabet codes with accompanying types of assistance are as follows: A—Formula Grants; B—Project Grants; C—Direct Payments for Specified Use; D—Direct Payments with Unrestricted Use; E—Direct Loans; F—Guaranteed/Insured Loans; G—Insurance; H—Sale, Exchange, or Donation of Property and Goods; I—Use of Property, Facilities, and Equipment; J—Provision of Specialized Services; K—Advisory Services and Counseling; L—Dissemination of Technical Information; M—Training; N—Investigation of Complaints; O—Federal Employment.

Definitions of the types of applicants used in this Index are given below.

**Individual** - Any person or persons as individuals, groups, or profit making organizations. Such persons and groups do not represent Federally Recognized Indian Tribal Governments. Includes Indians or other Native Americans who apply as individuals rather than as a member of a tribe or other Indian organization.

**Local** - Agencies or instrumentalities of political subdivisions within a State, to include cities, towns, townships, parishes, municipalities, villages, counties, school districts, and other special local districts. Included under local are Indian tribes on State reservations, Indian bands and group, Pueblos, Indian school boards, and State designated Indian tribes. Local does not include institutions of higher education and hospitals.

**Nonprofit** - A public or private agency or organization established by charter to perform specialized functions or services for the benefit of all or part of the general public. Functions or services are provided without charge or at cost, and earn no profit. The agency or organization has no shareholders to receive dividends.

**State** - Any agency or instrumentality of the fifty States of the United States, and the District of Columbia. State does not include the political subdivisions of the States, but does include institutions of higher education and hospitals.

**U.S. Territories** - Any agency or instrumentality of the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Trust Territories of the Pacific Islands, and Mariana Islands. Included are the political subdivisions of the territories, institutions of higher education, and hospitals.

**Federally Recognized Indian Tribal Organizations** - The governing body or governmental agency of an Indian Tribe, nation, or other organized group or community recognized and certified by the Secretary of the Interior. Included are Native villages as defined in the Alaska Native Claims Settlement Act.

(Note: The information contained in this Index was taken from the Applicant Eligibility section of the program descriptions and from other sources. As potential applicant, if you feel you also qualify to apply for assistance under particular program but the Index says otherwise, always contact the agency contact persons. As regarding whether or not a potential applicant is eligible for program, the agency is always the best source.

11.6 CAPSULE DESCRIPTIONS OF FEMA PROGRAMS  
FEDERAL INSURANCE ADMINISTRATION

83.100 Flood Insurance

FEDERAL AGENCY: Federal Insurance Administration Federal Emergency Management Agency.

OBJECTIVES: To enable persons to purchase insurance against losses from physical damage to or loss of real or personal property caused by floods, mudflow, or flood caused erosion in the United States and to promote wise flood plain management practices in the Nation's flood-prone and mudflow-prone areas.

TYPES OF ASSISTANCE: Insurance.

ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: Flood insurance can be made available in any community (a State or political subdivision thereof with authority to adopt and enforce flood plain management measures for the areas within its jurisdiction) that submits a properly completed application to FEMA including copies of enacted flood plain management measures consistent with the National Flood Insurance Program regulations.

Beneficiary Eligibility: Residents and property owners in applicant community.

INFORMATION CONTACTS:

Regional or Local Office: Contact the appropriate FEMA regional office, or the State Office responsible for coordinating the program's activities.

Headquarters Office: For Insurance questions: Federal Insurance Administration, FEMA, Washington, DC 20472. Telephone: 287-0750. For Engineering and Flood Plain Management questions: State and Local Programs and Support, FEMA, Washington, DC 20472. Telephone: (202) 287-0176.

RELATED PROGRAMS: 10.450, Crop Insurance; 12.104, Flood Plain Management Services; 59.008, Physical Disaster Loans; 83.501, State Assistance Program.

EXAMPLES OF FUNDED PROJECTS: Not applicable.

83.101 Urban Property Insurance  
(Riot Reinsurance and Fair Plans)

FEDERAL AGENCY: Federal Insurance Administration, Federal Emergency Management Agency.

OBJECTIVES: To assure availability of essential insurance coverage for urban property, particularly that located in areas possibly subject to riots or civil disturbance, by providing reinsurance to insurers against catastrophic losses from riot or civil disorder.

**TYPES OF ASSISTANCE:** Insurance.

**ELIGIBILITY REQUIREMENTS:**

**Applicant Eligibility:** For riot reinsurance: Property insurance companies participating as risk-bearing members of the FAIR Plan in the State in which reinsurance is written. For FAIR Plans: Must operate under State insurance authorities and meet Federal Insurance Administration standards. For owners of property in urban area: Property must be found insurable (upon inspection); premium rate depends upon the physical condition of the property without regard to environmental hazards. For States: FAIR Plan, commitment to reimburse the Director.

**Beneficiary Eligibility:** Property insurance companies should contact the Federal Insurance Administration to ascertain their eligibility.

**INFORMATION CONTACTS:**

**Regional or Local Office:** Contact the appropriate FEMA regional office, or State insurance authorities or State FAIR Plans.

**Headquarters Office:** Assistant Administrator, Office of Insurance Operations, Federal Insurance Administration, Federal Emergency Management Agency, Washington, DC 20472. Telephone: (202) 287-0840.

**RELATED PROGRAMS:** 59.008, Physical Disaster Loans; 83.102, Crime Insurance.

**EXAMPLES OF FUNDED PROJECTS:** Not applicable.

**83.102 Crime Insurance**

**FEDERAL AGENCY:** Federal Insurance Administration, Federal Emergency Management Agency.

**OBJECTIVES:** To enable businessmen and residents of homes and apartments to purchase burglary and robbery insurance in States where there is a critical problem of crime insurance availability at affordable rates which is not being resolved by appropriate State action.

**TYPES OF ASSISTANCE:** Insurance.

**ELIGIBILITY REQUIREMENTS:**

**Applicant Eligibility:** Businessmen and residents of homes and apartments for premises located in States designated by the Federal Insurance Administration. The applicant must have protective equipment which meets the FIA standards, and pay the specified premium. Protective devices are not currently required for commercial premises insured against loss from robbery only. Commercial premiums vary according to type of business and gross receipts. Commercial and residential premiums reflect degree of crime rate of the area in which premises are located.

**Beneficiary Eligibility:** Same as Applicant Eligibility.

**INFORMATION CONTACTS:**

**Regional or Local Office:** Any local insurance agent, broker, or servicing company may be contacted for information.

Headquarters Office: Assistant Administrator, Office of Insurance Operations, Federal Insurance Administration, Federal Emergency Management Agency, Washington, DC 20472. Telephone: (202) 287-0800.

RELATED PROGRAMS: 83.101, Urban Property Insurance.

EXAMPLE OF FUNDED PROJECTS: Not applicable.

#### TRAINING AND FIRE PROGRAMS DIRECTORATE

83.400 Emergency Management Institute  
- Student Expense Program (SEP)

FEDERAL AGENCY: Emergency Management Institute, Training and Fire Programs Directorate, Federal Emergency Management Agency.

OBJECTIVES: To assist in defraying the expenses of professional training for State and local emergency management/Civil Defense personnel and training for instructors who conduct courses under contract.

TYPES OF ASSISTANCE: Project Grants; Training.

#### ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: Individuals who need emergency management training and are assigned to an emergency management or civil defense position in State or local government.

Beneficiary Eligibility: Same as Applicant Eligibility.

#### INFORMATION CONTACTS:

Regional or Local Office: FEMA Regional Offices.

Headquarters Office: Emergency Management Institute, 16825 S. Seton Avenue, Emmitsburg, MD 21727. Telephone: (301) 447-6771.

RELATED PROGRAMS: None.

EXAMPLES OF FUNDED PROJECTS: Emergency management professional development series courses for State or local government, emergency management personnel; Emergency Management course; various program-specific training activities dealing with State local actions in managing a broad spectrum of emergencies.

83.401 Emergency Management - Architect/Engineer Student Development

FEDERAL AGENCY: Emergency Management Institute, Training and Fire Programs Directorate, Federal Emergency Management Agency.

OBJECTIVES: To develop capability of architectural or engineering students to survey buildings to determine the degree to which they provide protection against nuclear disaster effects.

TYPES OF ASSISTANCE: Training.

#### ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: Individuals in the United States (includes

territories) applying for enrollment must have completed one year of an architectural or engineering program in a college or technical institute or completed an equivalent correspondence course for architects and engineers.

Beneficiary Eligibility: Same as Applicant Eligibility.

**INFORMATION CONTACTS:**

Regional or Local Office: FEMA Regional Offices.

Headquarters Office: Nicholas DiTullo, Survey and Engineering Branch,  
Federal Emergency Management Agency, Washington, DC 20472. Telephone:  
(202) 287-0044.

RELATED PROGRAMS: 83.509, National Shelter Survey.

EXAMPLES OF FUNDED PROJECTS: The funded projects provide for on-campus Shelter Technician (SST) courses by FEMA certified instructors in schools of architecture and engineering and by SST correspondence courses. Fallout Shelter Analysis Courses, annual EMI conference for instructors qualified to teach Shelter Survey course.

**83.402 Radiological Emergency Response - Training Assistance**

FEDERAL AGENCY: Emergency Management Institute, Training and Fire Programs Directorate, Federal Emergency Management Agency.

OBJECTIVES: To assist State and local governments develop and maintain radiological emergency response plans and preparedness in support of fixed nuclear facilities and transportation involving radioactive materials.

TYPES OF ASSISTANCE: Advisory Services and Counseling; Training.

**ELIGIBILITY REQUIREMENTS:**

Applicant Eligibility: State or local government personnel who are, or will be, responsible for developing radiological emergency response plans and who are, or will be, responsible for responding to accidents involving radioactive materials. Applicants must be nominated by either the State Director of Radiological Health or the State Director of Emergency Management or Emergency Services.

Beneficiary Eligibility: Same as Applicant Eligibility.

**INFORMATION CONTACT:**

Regional or Local Office: None.

Headquarters Office: Emergency Management Institute, 16825 S. Seton Avenue, Emmitsburg, Maryland 21727. Telephone: (301) 447-6771.

RELATED PROGRAMS: 77.001, Radiation Control - Training Assistance and Advisory Counseling.

EXAMPLES OF FUNDED PROJECTS: Not applicable.

83.403 Training and Education Field Deployment  
(Regional Support Contracts (RSC)/Comprehensive  
Cooperative Agreements (CCA))

FEDERAL AGENCY: Emergency Management Institute, Training and Fire Program Directorate, Federal Emergency Management Agency.

OBJECTIVES: Regional Support Contacts (RSC): To provide the Regions with instructional capability for the training of FEMA support staffs (e.g., disaster hires), regional staffs of Federal agencies, and elected State/local government staffs (e.g., professional development training that is essentially interstate in nature). Comprehensive Cooperative Agreements (CCA): To provide FEMA support to State based training programs. This will include training that the States must agree to conduct and optional training necessary for State/local emergency management /civil defense programs.

TYPES OF ASSISTANCE: Formula Grants; Project Grants; Training.

ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: Individuals who need emergency management training, as described under the objectives.

Beneficiary Eligibility: Same as Applicant Eligibility.

INFORMATION CONTACTS:

Regional or Local Office: FEMA Regional Office.

Headquarters Office: Emergency Management Institute, 16825 S. Seton Avenue, Emmitsburg, MD 21227. Telephone: (301) 447-6771.

RELATED PROGRAMS: 83.400, Emergency Management Institute - Student Expense Program; 83.401, Emergency Management - Architect/Engineer Student Development; 83.402, Radiological Emergency Response - Training Assistance.

EXAMPLES OF FUNDED PROJECTS: Participants in the Professional Development Program for Emergency Management Coordinators; Radiological Defense Officer training, Public Officials training, Hazard Mitigation and Disaster Recovery Training.

83.405 Student Stipend Program

FEDERAL AGENCY: Emergency Management Institute, Training and Fire Directorate, Federal Emergency Management Agency.

OBJECTIVES: To provide stipends to students attending Academy courses and programs.

TYPES OF ASSISTANCE: Direct Payments for Specified Use.

ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: Any student other than a Federal or private industry employee or a foreign student who is a member of a fire department or has significant responsibility for fire prevention and control and has been accepted into a course may apply for stipend reimbursement.

Beneficiary Eligibility: Student or sponsoring organization.

INFORMATION CONTACTS:

Regional or Local Office: None.

Headquarters Office: National Emergency Training Center, Office of Admissions and Registration, 16825 S. Seton Avenue, Emmitsburg, MD 21727. Telephone: (301) 447-6771.

RELATED PROGRAMS: 83.403, Training and Education Field Deployment.

EXAMPLES OF FUNDED PROJECTS: Students are provided an opportunity to attend courses at the National Fire Academy resident facility with a minimal cost to the individual or the fire department represented. The increase in the number of students attending impacts on increasing the professional level of fire service personnel.

83.406 Training and Fire Programs  
Educational Program

FEDERAL AGENCY: Training and Fire Programs Directorate, Federal Emergency Management Agency.

OBJECTIVES: To increase the level of professional development of those individuals responsible for fire prevention and control, hazard mitigation, and disaster response and recovery through the delivery of training and education programs.

ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: Anyone who has responsibility for fire prevention and control, hazard mitigation, and disaster response and recovery is eligible to apply for attendance at the educational programs of the National Fire Academy and the Emergency Management Institute. Specific course pre-requisites and student selection criteria are included with the course descriptions.

Beneficiary Eligibility: The individual who attended the course and the community being serviced.

INFORMATION CONTACTS:

Regional or Local Office: Contact the Training and Education Office at the Federal Emergency Management Agency Regional Offices.

Headquarters Office: National Emergency Training Center, Office of Admissions and Registration, 16825 S. Seton Avenue, Emmitsburg, Maryland 21727. Telephone: (301) 447-6771.

RELATED PROGRAMS: 83.400, Emergency Management Institute - Student Expense Program; 83.405, Student Stipend Program.

EXAMPLES OF FUNDED PROJECTS: Not applicable.

83.407 State Fire Incident Reporting Assistance

FEDERAL AGENCY: Emergency Management Institute, Training and Fire Programs Directorate, Federal Emergency Management Agency.

OBJECTIVES: To assist States in the establishment and operation of a statewide fire incident and casualty reporting system.

TYPE OF ASSISTANCE: Project Grants.



**ELIGIBILITY REQUIREMENTS:**

**Applicant Eligibility:** States, The District of Columbia, Commonwealth of Puerto Rico, territories and possessions of the U.S. and large cities with populations of 500,000 or more are eligible to apply.  
**Beneficiary Eligibility:** State and local governments.

**INFORMATION CONTACTS:**

**Regional or Local Office:** Not applicable.  
**Headquarters Office:** U.S. Fire Administration, Training and Fire Programs Directorate, Federal Emergency Management Agency, Emmitsburg, MD 21727. Telephone: (301) 447-6771.

**RELATED PROGRAMS:** None.

**EXAMPLES OF FUNDED PROJECTS:** Computer output reports of each participating State are available.

**83.408 Technical Support Services**  
**(Master Planning Technical Support Services)**

**FEDERAL AGENCY:** Emergency Management Institute, Training and Fire Programs Directorate, Federal Emergency Management Agency.

**OBJECTIVES:** To encourage communities and multijurisdictional entities to engage in master planning for fire protection, and emergency services, and to assist them in their master planning efforts, including data collection and analysis, selection of alternatives, setting goals and objectives, and implementing the Master Plan.

**TYPES OF ASSISTANCE:** Provision of Specialized Services.

**ELIGIBILITY REQUIREMENTS:**

**Applicant Eligibility:** State, the District of Columbia, Commonwealth of Puerto Rico, territories and possessions of the U.S. are eligible to apply.  
**Beneficiary Eligibility:** State or local government.

**INFORMATION CONTACTS:**

**Regional or Local Office:** None.  
**Headquarters Office:** Edward M. Wall, Chairman, U.S. Fire Administration Working Group, Training and Fire Programs Directorate, Federal Emergency Management Agency, Emmitsburg, MD 21727. Telephone: (301) 447-6771.

**RELATED PROGRAMS:** None.

**EXAMPLES OF FUNDED PROJECTS:** Not applicable.

**83.409 Reimbursement for Firefighting on Federal Property**

**FEDERAL AGENCY:** Emergency Management Institute, Training and Fire Programs Directorate, Federal Emergency Management Agency.

**OBJECTIVES:** To provide that each fire service which engages in firefighting operations on Federal property may be reimbursed for their direct expenses and direct losses incurred in firefighting.

**TYPES OF ASSISTANCE:** Direct Payments for Specified Use.

**ELIGIBILITY REQUIREMENTS:**

Applicant Eligibility: Fire Departments, Volunteer and paid of the State, District of Columbia, Commonwealth, Territories and Possessions of the United States are eligible to apply.

Beneficiary Eligibility: Fire departments.

**INFORMATION CONTACTS:**

Regional or Local Office: None.

Headquarters Office: Marlene Thompson, Office of the Comptroller, Federal Emergency Management Agency, Washington, DC 20472. Telephone: (202) 287-0638.

**RELATED PROGRAMS:** None.

**EXAMPLES OF FUNDED PROJECTS:** Not applicable.

**STATE AND LOCAL PROGRAMS AND SUPPORT**

83.500 General Research, Development, and Demonstration Activity

**FEDERAL AGENCY:** State and Local Programs and Support, Federal Emergency Management Agency.

**OBJECTIVES:** To carry out basic and applied research and demonstration projects of high priority, usually preselected by the Agency to serve the needs of the Emergency Management Community and to improve and guide the Operation of Agency Programs.

**TYPES OF ASSISTANCE:** Project Grants (Cooperative Agreements).

**ELIGIBILITY REQUIREMENTS:**

Applicant Eligibility: State and local governments, U.S. Territories, Native Americans, institutions of higher education, hospitals, other nonprofit organizations, individuals and profit making organizations.

Beneficiary Eligibility: Same as Applicant Eligibility.

**INFORMATION CONTACTS:**

Regional or Local Office: All inquiries should be directed to the Headquarters Office.

Headquarters Office: Director, Acquisition Management Division, Federal Emergency Management Agency, 500 C Street, SW, Room 728, Washington, DC 20472.

**RELATED PROGRAMS:** None.

**EXAMPLES OF FUNDED PROJECTS:** Not applicable.

### 83.501 State Assistance Program

FEDERAL AGENCY: State and Local Programs and Support, Federal Emergency Management Agency.

OBJECTIVES: To facilitate each State's achievement of a level of expertise in flood hazard management which will enable the State to provide assistance to its constituent communities in discharging local flood hazard management responsibilities.

TYPES OF ASSISTANCE: Project Grants (Cooperative Agreements).

#### ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: States (includes the District of Columbia, Guam, Puerto Rico, and the Virgin Islands).

Beneficiary Eligibility: Same as Applicant Eligibility.

#### INFORMATION CONTACTS:

Regional or Local Office: Federal Emergency Management Agency Regional Office.

Headquarters Office: Emergency Management Programs Office, Federal Emergency Management Agency, Washington, DC 20472. Telephone: (202) 287-3850. (Use same 7-digit number for FTS).

RELATED PROGRAMS: 83.100, Flood Insurance.

EXAMPLES OF FUNDED PROJECTS: Developing and recommending State flood hazard mitigation legislation, policies, and programs, development of a dissemination system for flood hazard information; strategies for enhancing public awareness of flood hazards; implementing a flood plain management technical assistance program for communities; preparing a guide to assist communities in determining minimum first floor elevations in the absence of Flood Insurance Studies; publishing a National Flood Insurance Program guidebook for local administrators.

### 83.502 Acquisition of Flood-Damaged Structures (Section 1362)

FEDERAL AGENCY: State and Local Programs and Support, Federal Emergency Management Agency.

OBJECTIVES: To reduce future flood insurance and disaster assistance costs by providing an opportunity for repetitively and substantially damaged structures of policyholders to be permanently removed from flood risk areas, thus reducing risk of life from flooding and complementing Federal, State, and local efforts by restoring flood plains, protecting the environment, and providing recreational and open space resources.

TYPES OF ASSISTANCE: Sale, Exchange, or Donation of Property and Goods.

#### ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: Three general conditions must be met for real property to be considered eligible for acquisition under Section 1362:  
(1) the property must be located in a flood risk area, as determined by

FEMA; (2) the property must be covered by flood insurance under the NFIP; and (3) the property must meet any one of the following damage criteria: (i) property that has been damaged "substantially beyond repair by flood" while covered under the NFIP; (ii) property that has incurred significant flood damage on not less than three previous occasions while covered under the NFIP under a five year period and on each occasion the cost of repair, on the average, was at least 25 percent of the value of the structure; or (iii) property, while covered under the NFIP, that has sustained damage from a "single casualty of any nature" so that a statute, ordinance or regulation precludes its repair or restoration or permits repair or restoration only at significantly increased cost.

Beneficiary Eligibility: Community - must agree to accept title and manage, according to deed restrictions, etc.

**INFORMATION CONTACTS:**

Regional or Local Office: Federal Emergency Management Agency Regional Office.

Headquarters Office: Office of Disaster Assistance Programs, Federal Emergency Management Agency, Washington, DC 20472. Telephone: (202) 287-0520. (Use same 7-digit number for FTS).

**RELATED PROGRAMS:** 83.100, Flood Insurance.

**EXAMPLES OF FUNDED PROJECTS:** Not applicable.

**83.503 Emergency Management Assistance (Emergency Management Assistance for State and Local Governments)**

**FEDERAL AGENCY:** State and Local Programs and Support, Federal Emergency Management Agency.

**OBJECTIVES:** To develop effective civil defense organizations in the States and their political subdivisions in order to plan for and coordinate emergency activities in the event of attack or natural disaster.

**TYPES OF ASSISTANCE:** Formula Grants.

**ELIGIBILITY REQUIREMENTS:**

**Applicant Eligibility:** States (includes U.S. territories and interstate civil defense authorities). Local governments participate under the State's application. There must be a civil defense organization established pursuant to law, an emergency operational plan approved by the Federal Emergency Management Agency (local plans are approved as part of the State Plan) and a Federal Emergency Management Agency approved State Administrative Plan. Personnel administering the civil defense program must be under an approved merit system.

**Beneficiary Eligibility:** Same as Applicant Eligibility.

**INFORMATION CONTACTS:**

Regional or Local Office: FEMA regional offices. Persons are encouraged to communicate with their local or State Civil Defense Director.

Headquarters Office: Marilyn Barton, Emergency Management Programs Office, State and Local Programs and Support Directorate, Federal

Emergency Management Agency, Washington, DC 20472. Telephone: (202) 287-3850. (Use same 7-digit number for FTS).

RELATED PROGRAMS: 83.501, State Assistance Program; 83.504, State and Local Maintenance and Services; 83.505, State Disaster Preparedness Grants; 83.512, State and Local Emergency Operating Center; 83.513, State and Local Warning and Communication Systems.

EXAMPLES OF FUNDED PROJECTS: (1) Salaries and wages of civil defense employees; (2) Payment for special services of consultants; (3) Payment for annual, sick leave, etc; (4) Employee benefits, e.g., social security, health insurance, etc; (5) Transportation and per diem allowances for official travel; (6) Cost of day-to-day administrative services, supplies and equipment for the civil defense program including rent, repair and alteration of administrative space.

83.504 State and Local Maintenance and Services

FEDERAL AGENCY: State and Local Programs and Support, Federal Emergency Management Agency.

OBJECTIVES: To maintain emergency preparedness of State and local governments by furnishing matching funds for annual recurring and maintenance costs for State and local direction and control, and alerting and warning systems required to conduct a viable emergency management program.

TYPES OF ASSISTANCE: Project Grants.

ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: State (includes U.S. territories) or State and political subdivision (city, county, township, etc.) jointly. There must be a civil defense organization established pursuant to law; an emergency operational plan approved by the Federal Emergency Management Agency (local plans are approved as a part of the State plan); a Federal Emergency Management Agency approved program paper. Local applications must be transmitted through the appropriate State emergency management organization.

Beneficiary Eligibility: Same as Applicant Eligibility.

INFORMATION CONTACTS:

Regional or Local Office: FEMA Regional Offices. Interested persons are encouraged to communicate with their local or State Civil Defense Director.

Headquarters Office: Joseph H. Massa, Communications and Control Branch, SLPS, Federal Emergency Management Agency, Washington, DC 20472. Telephone: (202) 287-0048.

RELATED PROGRAMS: 83.503, Emergency Management Assistance; 83.512, State and Local Emergency Operating Centers; 83.513, State and Local Warning and Communication Systems.

EXAMPLES OF FUNDED PROJECTS: (1) Maintenance costs on a warning siren; (2) Rental fee for teletypes in an EOC; (3) Repair of malfunctioning EOC communications equipment.

**83.505 State Disaster Preparedness Grants  
(Disaster Preparedness Improvement Grants)**

**FEDERAL AGENCY:** State and Local Programs and Support, Federal Emergency Management Agency.

**OBJECTIVES:** To assist States in developing and improving State and local plans, programs, and capabilities for disaster preparedness and prevention.

**TYPES OF ASSISTANCE:** Project Grants.

**ELIGIBILITY REQUIREMENTS:**

**Applicant Eligibility:** All States are eligible (including District of Columbia, Puerto Rico, Virgin Islands, Guam, American Samoa, Trust Territory of the Pacific Islands, and the Commonwealth of the Northern Marianas.) Request must be in writing from the Governor or his authorized representative.

**Beneficiary Eligibility:** Same as Applicant Eligibility.

**INFORMATION CONTACTS:**

**Regional or Local Office:** Federal Emergency Management Agency Regional Offices.

**Headquarters Office:** Sylvia A. Carroll, Emergency Management Programs Office, State and Local Programs and Support, Federal Emergency Management Agency, Washington, DC 20472. Telephone: (202) 287-3891 (Use same 7 digit Number for FTS).

**RELATED PROGRAMS:** 83.501, State Assistance Program; 83.503, Emergency Management Assistance; 83.506, Earthquake and Hurricane Preparedness Planning Grants; 83.516, Disaster Assistance.

**EXAMPLES OF FUNDED PROJECTS:** A grant products listing is available upon request.

**83.506 Earthquake and Hurricane Preparedness Planning Grants  
(Earthquake and Hurricane Preparedness Plans)**

**FEDERAL AGENCY:** State and Local Programs and Support, Federal Emergency Management Agency.

**OBJECTIVES:** To prepare plans for all levels of government for preparedness capabilities for severe earthquakes or hurricanes in certain high-density, high-risk areas.

**TYPES OF ASSISTANCE:** Project Grants (Cooperative Agreements).

**ELIGIBILITY REQUIREMENTS:**

**Applicant Eligibility:** State or local governments serving highly populated localities designated as highly vulnerable to earthquake and/or hurricane disasters are eligible. (Grant or cooperative agreement would usually be to a State -- as defined by the Disaster Relief Act of 1974 -- but could be to a substate jurisdiction, or to an interstate consortium.) Request must be in writing from the Governor or Governor's authorized representative.

Beneficiary Eligibility: Same as Applicant Eligibility.

**INFORMATION CONTACTS:**

Regional or Local Office: Federal Emergency Management Agency Regional Offices.

Headquarters Office: Ross MacKay, Natural Hazards Division, State and Local Programs and Support, Federal Emergency Management Agency, Washington, DC 20472. Telephone: (202) 287-0248 (Use same 7-digit number for FTS).

**RELATED PROGRAMS:** 83.505, State Disaster Preparedness Grants; 83.516, Disaster Assistance.

**EXAMPLES OF FUNDED PROJECTS:** Earthquake loss studies have been completed in the San Francisco Bay area, the Boston area, Los Angeles, Puget Sound area, Salt Lake City area, Anchorage, Alaska, and Honolulu, Hawaii. Vulnerability analyses are underway in the Boston area, Central United States, and Charleston, South Carolina; six other studies are projected to complete the loss study effort in 12 high-risk, high-population areas. State and local earthquake preparedness plans have been initiated in San Francisco, Los Angeles, Puget Sound, Salt Lake City, Anchorage, and Honolulu. A prototypical earthquake preparedness project is underway in Southern California. The results and products of that project will be transferred to other earthquake prone areas. A prototypical hurricane preparedness project will be completed in fiscal year 1983 in the Tampa Bay, Florida area. Projects in other high risk areas will be initiated over the next several fiscal years.

**83.508 Radiological Systems Maintenance**

**FEDERAL AGENCY:** State and Local Programs and Support, Federal Emergency Management Agency.

**OBJECTIVES:** To assist in developing a capability in every locality for the detection and measurement of hazardous levels of radiation; to maintain all civil defense radiological instruments in a calibrated and operationally ready condition for both peacetime and wartime radiological emergencies.

**TYPE OF ASSISTANCE:** Project Grants; Provision of Specialized Services.

**ELIGIBILITY REQUIREMENTS:**

**Applicant Eligibility:** Each FEMA region has negotiated a cooperative agreement for this service with each of its State civil defense organizations. Local governments obtain assistance and services from the State Civil Defense Organization. State personnel must be under an approved merit system.

**Beneficiary Eligibility:** Same as Applicant Eligibility.

**INFORMATION CONTACTS:**

Regional or Local Office: FEMA regional offices. Local governments should contact their State Civil Defense Office.

Headquarters Office: Michel S. Pawlowski, Physical Scientist Administrator, Logistics Support Branch, Emergency Management Systems Support, Emergency Management Programs Office, Washington, DC 20472. Telephone: (202) 287-0060.

RELATED PROGRAMS: None.

EXAMPLES OF FUNDED PROJECTS: FEMA contracts with States (including DC and Puerto Rico) for them to provide maintenance and calibration services on radiation detection and measurement instruments at the State and local government levels.

83.509 National Shelter Survey  
(Shelter Surveys)

FEDERAL AGENCY: State and Local Programs and Support, Federal Emergency Management Agency.

OBJECTIVES: To identify shelter in existing buildings and mines, caves, tunnels, etc., sufficient to protect the nation's population from the effect of nuclear weapons and other natural and technological hazards.

TYPES OF ASSISTANCE: Provision of Specialized Services.

ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: State (includes territories) and local governments. Areas are selected for survey based upon the availability of survey funds and upon the potential usability of additional shelter in each area.

Beneficiary Eligibility: Same as Applicant Eligibility.

INFORMATION CONTACTS:

Regional or Local Office: FEMA regional offices. Individual State civil defense offices may be contacted for further information.

Headquarters Office: Nicholas DiTullo, Engineering and Survey Branch, Federal Emergency Management Agency, Washington, DC 20472. Telephone: (202) 287-0044.

RELATED PROGRAMS: None.

EXAMPLES OF FUNDED PROJECTS: Buildings, mines, caves, tunnels, etc., are surveyed to determine the degree of protection afforded from the effects of nuclear weapons.

83.510 Shelter Development (Advisory Services)

FEDERAL AGENCY: State and Local Programs and Support, Federal Emergency Management Agency.

OBJECTIVES: To provide technical guidance and assistance to architects involved in the design of new building projects so as to maximize the incorporation of shelter features.

TYPES OF ASSISTANCE: Advisory Services and Counseling.



**ELIGIBILITY REQUIREMENTS:**

**Applicant Eligibility:** Any architect or engineer in the United States (includes territories) involved in design of a new building.

**Beneficiary Eligibility:** Same as Applicant Eligibility.

**INFORMATION CONTACTS:**

**Regional or Local Office:** Architects, engineers and building owners desiring this advisory service are encouraged to contact FEMA regional offices. State and local directors may also be contacted.

**Headquarters Office:** Nicholas DiTullo, Engineering and Survey Branch, Federal Emergency Management Agency, Washington, DC 20472. Telephone: (202) 287-0044.

**RELATED PROGRAMS:** None.

**EXAMPLES OF FUNDED PROJECTS:** Technical advice is provided to architects on radiation shielding and the incorporation of fallout protection in the construction of building. There are no funded projects per se. Technical personnel stationed at the FEMA Regional Offices will provide the desired technical assistance (advisory services) at no cost to the recipient.

**83.511 State Radiological Defense Officers (RDO's)**

**FEDERAL AGENCY:** State and Local Programs and Support, Federal Emergency Management Agency.

**OBJECTIVES:** To develop and implement a Radiological Defense (RADEF) Program for the Radiological Hazards that are a potential threat to the State and Local jurisdictions. In a crisis period under nuclear attack conditions, the Radiological Defense Officer (RDO) interprets fallout effects and provides technical advice to government leaders in Emergency Operation Centers for their use in directing efforts to help the population survive in a fallout environment.

**TYPES OF ASSISTANCE:** Project Grants; Provision of Specialized Services.

**ELIGIBILITY REQUIREMENTS:**

**Applicant Eligibility:** In each of the 50 states, the District of Columbia, and Puerto Rico, the State emergency management (civil defense) organization must negotiate a Cooperative Agreement for this service with the respective FEMA regional office. State personnel must be under an approved merit system. Local governments may obtain services from the State emergency management (civil defense) organization.

**Beneficiary Eligibility:** Same as Applicant Eligibility.

**INFORMATION CONTACTS:**

**Regional or Local Office:** FEMA regional offices. Local governments should contact their State Civil Defense Office.

**Headquarters Office:** George C. Meyer, Systems Development Division, Office of Emergency Management Programs, Washington, DC 20472. Telephone: (202) 287-3839.

**RELATED PROGRAMS:** None.

EXAMPLES OF FUNDED PROJECTS: (1) Salary of State RDO's; (2) Payment for vacations, sick leave, terminal leave, etc.; (3) Employee benefits, e.g., social security, health insurance, etc.; (4) Transportation and per diem allowances for official travel; (5) Indirect costs.

#### 83.512 State and Local Emergency Operating Centers (EOC)

FEDERAL AGENCY: State and Local Programs and Support, Federal Emergency Management Agency.

OBJECTIVES: To enhance effective, reliable and survivable direction and control capabilities of State and local government.

TYPES OF ASSISTANCE: Project Grants.

#### ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: State (including U.S. territories) or State and political subdivision (city, county, townships, etc.) jointly. There must be a civil defense organization established pursuant to law; an emergency operational plan approved by the Federal Emergency Management Agency (local plans are approved as a part of the State plan); a Federal Emergency Management Agency approved program paper. Local civil defense applications must be transmitted through the appropriate State civil defense organization.

Beneficiary Eligibility: Same as Applicant Eligibility.

#### INFORMATION CONTACTS:

Regional or Local Office: FEMA Regional offices. Interested persons are encouraged to communicate with their local or State Civil Defense Director.

Headquarters Office: Earl T. Tilton, Communications and Control Branch, Emergency Management Systems Support Division. State and Local Programs and Support, Federal Emergency Management Agency, Washington, DC 20472. Telephone: (202) 287-0055.

RELATED PROGRAMS: 83.503, Emergency Management Assistance; 83.504, State and Local Maintenance and Services; 83.513, State and Local Warning and Communication Systems.

EXAMPLES OF FUNDED PROJECTS: (1) Costs of planning and designing and EOC, including architectural and engineering costs; (2) costs of construction necessary to develop the EOC facility and for equipment to make the EOC operational; (3) costs of equipping a mobile or transportable command center for civil defense direction and control use.

#### 83.513 State and Local Warning and Communication Systems

FEDERAL AGENCY: State and Local Programs and Support, Federal Emergency Management Agency.

OBJECTIVES: To maintain the civil defense readiness of State and local governments by furnishing matching funds for the purchase of equipment and supporting materials for State and local direction and control, and alerting and warning systems.

TYPES OF ASSISTANCE: Project Grants.

ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: State (includes U.S. territories) or local governments, such as city, county, township. There must be a civil defense organization established pursuant to law; an emergency operational plan approved by the Federal Emergency Management Agency; a Federal Emergency Management Agency approved program paper.

Beneficiary Eligibility: Same as Applicant Eligibility.

INFORMATION CONTACTS:

Regional or Local Office: FEMA Regional Offices. Interested persons are encouraged to communicate with their State Civil Defense Director.

Headquarters Office: Joseph H. Massa, Communications Management Officer, Communications and Control Branch, State and Local Programs and Support, Federal Emergency Management Agency, Washington, DC 20472.  
Telephone: (202) 287-0048.

RELATED PROGRAMS: 83.503, Emergency Management Assistance; 83.504, State and Local Maintenance and Services; 83.512, State and Local Emergency Operating Centers.

EXAMPLES OF FUNDED PROJECTS: Not applicable.

83.514 Population Protection Planning

FEDERAL AGENCY: State and Local Programs and Support, Federal Emergency Management Agency.

OBJECTIVES: To assist States and localities to develop population protection plans to prepare for and respond to the full range of emergencies that a jurisdiction may face. This includes such hazards as earthquakes, floods, hurricanes, tornadoes and large-scale hazardous materials incidents. It also includes conventional war and the possibility of nuclear weapons threat, attacks, or accidents as they affect the civilian population.

TYPES OF ASSISTANCE: Project Grants (Cooperative Agreements).

ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: States (including U.S. territories) are eligible to participate.

Beneficiary Eligibility: Same as Applicant Eligibility.

INFORMATION CONTACTS:

Regional or Local Office: FEMA regional offices. Local governments should contact their State Civil Defense Office.

Headquarters Office: Seymour Wengrovitz, State and Local Programs and Support Directorate, FEMA, Washington, DC 20472.  
Telephone: (202) 287-3835.

RELATED PROGRAMS: None.

EXAMPLES OF FUNDED PROJECTS: Not applicable.

### 83.515 Emergency Broadcast System Guidance and Assistance

FEDERAL AGENCY: State and Local Programs and Support, Federal Emergency Management Agency.

OBJECTIVES: To enhance and develop an emergency broadcast capability to provide emergency information and direction to the public by national, State and local officials.

TYPES OF ASSISTANCE: Project Grants.

#### ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: Broadcast stations must be a part of the emergency broadcast system and State and Local governments must have an EBS Operational Plan.

Beneficiary Eligibility: Same as Applicant Eligibility.

#### INFORMATION CONTACTS:

Regional or Local Office: FEMA Regional Office addresses.

Headquarters Office: James S. Gilbertson, Emergency Management Officer, State and Local Programs and Support, Washington, DC 20472. Telephone: (202) 287-0052.

RELATED PROGRAMS: 83.512, State and Local Emergency Operating Centers.

EXAMPLES OF FUNDED PROJECTS: This program provides funds for: Design, construction of a fallout protected room; purchase of electrical generator, fuel tank, programming equipment, remote pickup units, protection from electromagnetic pulse, and installation of equipment. Funding is authorized beginning in FY '83 to test State and Local EBS Systems.

### 83.516 Disaster Assistance

FEDERAL AGENCY: State and Local Programs and Support, Federal Emergency Management Agency.

OBJECTIVES: To provide assistance to States, local governments, selected private nonprofit facilities, and individuals in alleviating suffering and hardship resulting from emergencies or major disasters declared by the President.

TYPES OF ASSISTANCE: Project Grants; Use of Property, Facilities, and Equipment; Provision of Specialized Services.

#### ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: State and local governments in declared emergency or major disaster areas, owners of selected private nonprofit facilities, and individual disaster victims.

Beneficiary Eligibility: Same as Applicant Eligibility.

#### INFORMATION CONTACTS:

Regional or Local Office: FEMA Regional Offices.

Headquarters Office: Federal Emergency Management Agency, Office of Disaster Assistance Programs, Washington, DC 20472.  
Telephone: (202) 634-7800.

RELATED PROGRAMS: 10.054, Emergency Conservation Program; 10.404, Emergency Loans; 12.102, Flood Control Works and Federally Authorized Coastal Protection Works, Rehabilitation; 12.103, Flood Fighting and Rescue Operations, and Emergency Protection of Coastal Protective Works Federally Authorized; 14.119, Mortgage Insurance - Homes for Disaster Victims; 59.008, Physical Disaster Loans; 83.505, State Disaster Preparedness Grants.

EXAMPLES OF FUNDED PROJECTS: Not applicable.

83.517 Electromagnetic Pulse (EMP) Technical Support

FEDERAL AGENCY: State and Local Programs and Support, Federal Emergency Management Agency.

OBJECTIVES: To protect Broadcast Stations, Emergency Operations Centers, and Emergency Communications Systems at State and local level from the damaging, high voltage, high current pulse of electrical energy caused by the intense electromagnetic field from a nuclear detonation.

TYPES OF ASSISTANCE: Provision of Specialized Services; Advisory Services and Counseling.

ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: State and local governments, and selected Emergency Broadcast Systems (EBS) radio stations participating in the Broadcast Station Protection Program.

Beneficiary Eligibility: Same as Applicant Eligibility.

INFORMATION CONTACTS:

Regional or Local Office: FEMA Regional Directors or EMP Project Officer.

Headquarters Office: Mr. John A. Hain, Communications and Control Branch, Emergency Management Systems Support, Washington, DC 20472. Telephone: (202) 287-3856.

RELATED PROGRAMS: None.

EXAMPLES OF FUNDED PROJECTS: EMP protection of State and local EOC's EMP protection of Emergency Broadcast System (EBS) radio stations participating in the Broadcast Station Protection Program. EMP protection of State and local direction and control capabilities.

### 83.515 Emergency Broadcast System Guidance and Assistance

FEDERAL AGENCY: State and Local Programs and Support, Federal Emergency Management Agency.

OBJECTIVES: To enhance and develop an emergency broadcast capability to provide emergency information and direction to the public by national, State and local officials.

TYPES OF ASSISTANCE: Project Grants.

#### ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: Broadcast stations must be a part of the emergency broadcast system and State and Local governments must have an EBS Operational Plan.

Beneficiary Eligibility: Same as Applicant Eligibility.

#### INFORMATION CONTACTS:

Regional or Local Office: FEMA Regional Office addresses.

Headquarters Office: James S. Gilbertson, Emergency Management Officer, State and Local Programs and Support, Washington, DC 20472. Telephone: (202) 287-0052.

RELATED PROGRAMS: 83.512, State and Local Emergency Operating Centers.

EXAMPLES OF FUNDED PROJECTS: This program provides funds for: Design, construction of a fallout protected room; purchase of electrical generator, fuel tank, programming equipment, remote pickup units, protection from electromagnetic pulse, and installation of equipment. Funding is authorized beginning in FY '83 to test State and Local EBS Systems.

### 83.516 Disaster Assistance

FEDERAL AGENCY: State and Local Programs and Support, Federal Emergency Management Agency.

OBJECTIVES: To provide assistance to States, local governments, selected private nonprofit facilities, and individuals in alleviating suffering and hardship resulting from emergencies or major disasters declared by the President.

TYPES OF ASSISTANCE: Project Grants; Use of Property, Facilities, and Equipment; Provision of Specialized Services.

#### ELIGIBILITY REQUIREMENTS:

Applicant Eligibility: State and local governments in declared emergency or major disaster areas, owners of selected private nonprofit facilities, and individual disaster victims.

Beneficiary Eligibility: Same as Applicant Eligibility.

#### INFORMATION CONTACTS:

Regional or Local Office: FEMA Regional Offices.

Headquarters Office: Federal Emergency Management Agency, Office of Disaster Assistance Programs, Washington, DC 20472.  
Telephone: (202) 634-7800.

## 11.7 FEMA OFFICES

### NATIONAL HEADQUARTERS

Federal Emergency Management Agency  
Federal Center Plaza  
500 C. Street, S.W.  
Washington, D.C. 20472  
(202) 287-0565

### REGIONAL HEADQUARTERS

#### Region I

Federal Emergency Management  
Agency  
Room 452  
McCormick Post Office  
and Court House  
Boston, MA 02109  
(617) 223-3754

#### Region II

Federal Emergency Management  
Agency  
Room 19-100  
26 Federal Plaza  
New York, NY 10278  
(212) 264-4981

#### Region III

Federal Emergency Management  
Agency  
Curtis Building  
Sixth and Walnut Streets  
Philadelphia, PA 19106  
(301) 597-0137

#### Region IV

Federal Emergency Management  
Agency  
Suite 667  
1275 Peachtree Street, N.E.  
Atlanta, GA 30309  
(912) 226-1761

#### Region V

Federal Emergency Management  
Agency  
300 S. Wacker Drive  
24th Floor  
Chicago, IL 60606  
(312) 353-8661

#### Region VI

Federal Emergency Management  
Agency  
Federal Center  
Denton, TX 76201  
(817) 387-5811

#### Region VII

Federal Emergency Management  
Agency  
Second Floor  
911 Walnut Street  
Kansas City, MO 64106  
(816) 374-5587

#### Region VIII

Federal Emergency Management  
Agency  
Building 710  
Denver Federal Center  
Denver, CO 80225  
(303) 234-2557

Region IX

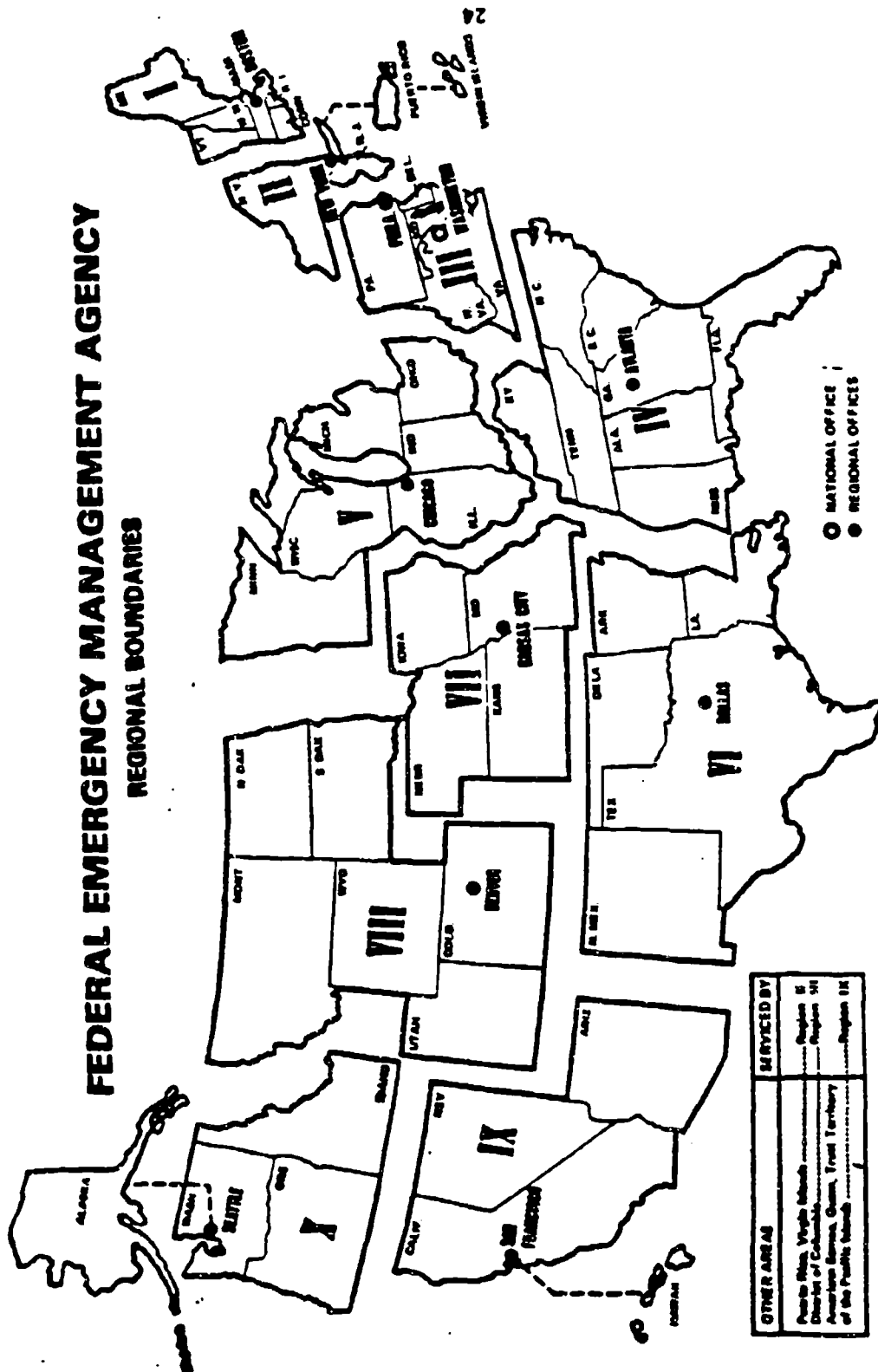
Federal Emergency Management  
Agency  
Room 220  
211 Main Street  
San Francisco, CA 94105  
(415) 556-9412

Region X

Federal Emergency Management  
Agency  
Federal Regional Center  
130 228th Street, SW  
Bothell, WA 98011  
(206) 481-8800



# FEDERAL EMERGENCY MANAGEMENT AGENCY REGIONAL BOUNDARIES



November 1979  
FEMA Chart No. 3

# 11.8 STATE OFFICIALS RESPONSIBLE FOR DISASTER OPERATIONS\*

<u>STATE/REGION</u>	<u>STATE EMERGENCY DIRECTOR</u>	<u>RESPONSIBLE SENIOR OFFICIAL</u>
Alabama IV	Mr. Dan H. Turner Director, Alabama Emergency Management Agency 64 North Union Street Montgomery, AL 36130 (205) 261-3318	Same
Alaska X	Mr. Lloyd I. Turner Director, Division of Emergency Services Department of Military Veterans Affairs P.O. Box 2267 Palmer, AK 99645 (907) 376-3061	Maj. Gen. Edward Pagano The Adjutant General 3601 C Street, Suite 620 Anchorage, AK 99503 (907) 243-0656
American Samoa X	Mr. Igafo T. Faigata Director, Office of Territorial Emergency Management Coordination Office of the Governor P.O. Box 3296 Pago Pago, American Samoa 96799 011-684-633-2331	Same
Arizona IX	Col. Richard Colson Director, Arizona Division of Emergency Services National Guard Building 5636 East McDowell Road Phoenix, AZ 85008 (602) 244-0504	Maj. Gen. Donald L. Owens The Adjutant General National Guard Building 5636 East McDowell Road Phoenix, AZ 85008 (602) 273-9710
Arkansas VI	Mr. Leon McGoogan Director, Office of Emergency Services P.O. Box 758 Conway, AR 72032 (501) 329-5601 (501) 374-1201 (Little Rock)	Same

NOTE: All correspondence should be addressed to the State Emergency  
Director unless denoted by an asterisk.

\* Source: FEMA -9/ April 1984

<u>STATE/REGION</u>	<u>STATE EMERGENCY DIRECTOR</u>	<u>RESPONSIBLE SENIOR OFFICIAL</u>
California IX	Mr. William M. Medigovich Director, Office of Emergency Services, State of California P.O. Box 9577 Sacramento, CA 95823 (916) 427-4201	Same
Colorado VIII	Mr. John P. (Pat) Byrne Director, Disaster Emergency Services DOC, Camp George West Golden, CO 80401 (303) 273-1624	Maj. Gen. John L. France The Adjutant General 3000 Logan Street Denver, CO 80203 (303) 733-2431
Connecticut I	Mr. Frank Mancusco State Director, Office of Civil Preparedness Department of Public Safety 360 Broad Street Hartford, CT 06105 (203) 566-3180/4338	Same
Delaware III	Mr. Clarke V. Jester Director, Division of Emergency Planning and Operations P.O. Box C Delaware City, DE 19706 (302) 834-4531	Mr. Edward J. Steiner Secretary of Public Safety Department of Public Safety Emergency Planning and Operations Division P.O. Box C Delaware City, DE 19706 (302) 736-4311
District of Columbia III	Mr. Joseph P. Yeldell Director, Office of Emergency Preparedness 300 Indiana Avenue, N.W. Municipal Center, Rm 5009 Washington, D.C. 20001 (202) 727-6161	Same
Florida IV	Mr. Gordon Guthrie Chief, Bureau of Emergency Management 1720 S. Gadsden Street Tallahassee, FL 32301 (904) 488-1900	Mr. John DeGrove Secretary, Department of Veterans and Community Affairs 2571 Executive Center Circle East Tallahassee, FL 32301 (904) 488-6001

<u>STATE/REGION</u>	<u>STATE EMERGENCY DIRECTOR</u>	<u>RESPONSIBLE SENIOR OFFICIAL</u>
Georgia IV	Mr. Billy J. Clack Deputy Director, Georgia Emergency Management Agency P.O. Box 18055 Atlanta, GA 30316 (404) 656-5500	Maj. Gen. Joseph W. Griffin The Adjutant General and Director, Georgia Emergency Management Agency P.O. Box 18055 Atlanta, GA 30316 (404) 656-1700
Guam IX	Mr. Francisco Carbullido Director, Civil Defense/Guam Emergency Services Territory of Guam P.O. Box 2877 Agana, Guam 96910 011-671-477-9841	Same
Hawaii IX	Maj. Gen. Alexis T. Lum The Adjutant General of the National Guard and Director of Civil Defense Department of Defense 3949 Diamond Head Road Honolulu, HI 86816 (808) 734-2195	Same
Idaho X	Mr. Darrell Waller Coordinator, Bureau of Disaster Services Military Division 650 West State Street Boise, ID 83720 (208) 334-3460	Maj. Gen. James S. Brooks The Adjutant General Military Division P.O. Box 45 Boise, ID 83701 (208) 385-5242
Illinois V	Mr. E. Erie Jones Director, Illinois Emergency Services and Disaster Agency 110 East Adams Street Springfield, IL 62706 (217) 782-2700	Same
Indiana V	Mr. William J. Patterson Director, Indiana Department of Civil Defense and Emergency Management State Office Building, B-90 100 North Senate Avenue Indianapolis, IN 46204 (317) 232-3830	Mr. Orval Lundy Acting Commissioner Department of Administration State Office Building, Rm 507 Indianapolis, IN 46204 (317) 232-3114

<u>STATE/REGION</u>	<u>STATE EMERGENCY DIRECTOR</u>	<u>RESPONSIBLE SENIOR OFFICIAL</u>
Iowa VII	Mr. John D. Crandall Director, Office of Disaster Services Hoover State Office Bldg. Level A Des Moines, IA 50319 (515) 281-3231	Maj. Gen. Roger W. Gilbert The Adjutant General and Executive-Director, Dept. of Public Defense, Camp Dodge R.R. One Grimes, IA 50111 (515) 278-9211
Kansas VII	Mr. Mahlon G. Weed Deputy Director, Division of Emergency Preparedness P.O. Box C-300 Topeka, KS 66601 (913) 233-9253 - X301	Maj. Gen. Ralph T. Tice The Adjutant General and Director, Division of Emergency Services P.O. Box C-300 Topeka, KS 66601 (913) 233-7560 - X101
Kentucky IV	Brig. Gen. Wilbur R. Buntin, Jr. (Ret.) Executive Director, Kentucky Disaster & Emergency Services Boone Center, Parkside Drive Frankfort, KY 40601 (502) 564-8680	Maj. Gen. Billy G. Wellman The Adjutant General & State Director of Emergency Services Boone National Guard Center Frankfort, KY 40601 (502) 564-8558
Louisiana VI	Mr. Thomas M. Creaghan Assistant Secretary, Office of Emergency Preparedness Department of Public Safety P.O. Box 66536, Audubon Station Baton Rouge, LA 70896 (505) 342-5470	Mr. Wiley McCormick Deputy Secretary, Department of Public Safety P.O. Box 6614 Baton Rouge, LA 70896 (505) 925-6117
Maine I	Mr. Richard D. Dutremble Director, Bureau of Civil Emergency Preparedness Department of Defense & Veterans Services State Office Building, Station 72 Augusta, ME 04333 (207) 622-6201/289-3211	Maj. Gen. Paul R. Day The Adjutant General Department of Defense & Veterans Services Maine National Guard Camp Keyes Augusta, ME 04333 (207) 622-9331 - X 4225
Maryland III	Mr. Edwin O. Tremper Acting Director, Maryland Emergency Management and Civil Defense Agency Reisterstown Road & Sudbrook Lane Pikesville, MD 21208 (301) 486-4422	Mr. Frank A. Hall Secretary, Department of Public Safety and Correctional Services Investment Place, Suite 500 Townson, MD 21204 (301) 321-3832

<u>STATE/REGION</u>	<u>STATE EMERGENCY DIRECTOR</u>	<u>RESPONSIBLE SENIOR OFFICIAL</u>
Massachusetts I	Mr. Robert J. Boulay Director, Massachusetts Civil Defense Agency and Office of Emergency Preparedness P.O. Box 1496 400 Worcester Road Framingham, MA 01701 (617) 237-0200/875-1381	Mr. Charles V. Barry Secretary, Department of Public Safety One Ashburton Place, Rm 2133 Boston, MA 02108 (617) 727-7775
Michigan V	Captain Peter Basolo Deputy Director, State Division of Emergency Services Department of State Police 11 S. Capitol Avenue, Lower Level Lansing, MI 48913 (517) 373-0617 (24 hrs.) or 337-6100	Col. Gerald L. Hough Director, Department of State Police and State Division of Emergency Services 714 S. Harrison Road East Lansing, MI 48823 (517) 337-6157
Minnesota V	Mr. Thomas Motherway Director, Division of Emergency Services Department of Public Safety State Capitol, B-5 St. Paul, MN 55155 (612) 296-2233	Mr. Paul Tschida Commissioner, Department of Public Safety 211 Transportation Bldg. St. Paul, MN 55155 (612) 296-6642
Mississippi IV	Mr. James E. Maher Director, Emergency Management Agency P.O. Box 4501, Fondren Station Jackson, MS 39216 (601) 352-9100	Same
Missouri VII	Mr. Richard Rice Director, State Emergency Management Agency P.O. Box 116 Jefferson City, MO 65102 (314) 751-2321 - X 379	Maj. Gen. Charles Kiefner The Adjutant General Edward Daniels, Director, Department of Public Safety P.O. Box 749 Jefferson City, MO 65102 (314) 751-2321 - X 310 (314) 751-4905 (Daniels)
Montana VIII	Col. Carlyn Gilbertson Coordinator, Disaster and Emergency Services Division Department of Military Affairs P.O. Box 4789 Helena, MT 59604 (406) 449-3034	Maj. Gen. James W. Duffy The Adjutant General Department of Military Affairs P.O. Box 4789 Helena, MT 59604 (406) 449-2778

<u>STATE/REGION</u>	<u>STATE EMERGENCY DIRECTOR</u>	<u>RESPONSIBLE SENIOR OFFICIAL</u>
Nebraska VII	Mr. Francis C. Laden Assistant Director, Nebraska Civil Defense Agency Military Department 1300 Military Road Lincoln, NE 68508 (402) 473-1410	Maj. Gen. James Carmona The Adjutant General and Director, Nebraska Civil Defense Agency National Guard Center 1300 Military Road Lincoln, NE 68508 (402) 473-1100
Nevada IX	Mr. Robert J. Andrews Director, Nevada Division of Emergency Services Military Department 2525 S. Carson Street, Capitol Complex Carson City, NV 89710 (702) 885-4240	Maj. Gen. Robert Dwyer The Adjutant General Military Department 2525 S. Carson Street, Capitol Complex Carson City, NV 89710 (702) 887-7302
New Hampshire I	Mr. Richard H. Strome Director, New Hampshire Civil Defense Agency One Airport Road Concord, NH 03301 (603) 271-2231	Same
New Jersey II	Maj. Harold Spedding Director, Office of Emergency Management New Jersey State Police P.O. Box 7068 West Trenton, NJ 08625 (609) 882-2000 - X201	Col. Clinton Pagano Superintendent of State Police P.O. Box 7068 West Trenton, NJ 08625 (609) 882-2000
New Mexico VI	Brig. Gen. Harry Taylor Deputy Director, Civil Emergency Preparedness Division P.O. Box 4277 Santa Fe, NM 87501 (505) 473-2476	Maj. Gen. Edward D. Baca The Adjutant General and Director, Office of Military Affairs, Civil Emergency Preparedness Division P.O. Box 4277 Santa Fe, NM 87501 (505) 473-2402
New York II	Mr. Donald A. DeVito Director, State Emergency Management Office Division of Military and Naval Affairs Public Security Bldg. State Campus Albany, NY 12226 (518) 457-2222	Maj. Gen. Vito J. Castellano The Adjutant General of New York and NYS Division of Military and Naval Affairs Building 22, State Campus Albany, NY 12226 (518) 457-6966

<u>STATE/REGION</u>	<u>STATE EMERGENCY DIRECTOR</u>	<u>RESPONSIBLE SENIOR OFFICIAL</u>
North Carolina IV	Mr. Tom Pugh Director, North Carolina Division of Emergency Management 116 West Jones Street, Subbasement Raleigh, NC 27611 (919) 733-3867	Mr. Herman R. Clark Secretary, Department of Crime Control and Public Safety P.O. Box 27687 Raleigh, NC 27611 (919) 733-2126
North Dakota VIII	Mr. Donald D. Affeldt Director, Disaster Emergency Services P.O. Box 1817 Bismarck, ND 58505 (701) 224-2111	Maj. Gen. C. Emerson Murry The Adjutant General P.O. Box 1817 Bismarck, ND 58505 (701) 224-5102
Northern Mariana Islands IX	Mr. Felix Sasamoto Director of Civil Defense Office of the Governor Commonwealth of the Northern Mariana Islands Saipan, Mariana Islands 96950 011-670-6592	* Mr. Ramon S. Guerrero Special Assistant for Administration Office of the Governor Commonwealth of the Northern Mariana Islands Saipan, Mariana Islands 96950 011-670-6407
Ohio V	Mr. Richard M. Lockhart Deputy Director, Ohio Disaster Services Agency 2825 West Granville Road Worthington, OH 43085 (614) 889-7150	Maj. Gen. Raymond R. Galloway The Adjutant General and Director, Ohio Disaster Services Agency Ohio National Guard 2825 West Granville Road Worthington, OH 43085 (614) 889-7070
Oklahoma VI	Mr. Norris Price Director, Oklahoma Civil Defense Agency P.O. Box 53365 Oklahoma City, OK 73152 (405) 521-2481	Same
Oregon X	Mr. Lyn G. Hardy Administrator, Emergency Management Division Oregon State Executive Dept. 43 State Capitol Building Salem, OR 97310 (503) 378-4124 1-800-452-0311 (24 hrs.)	Same

\* Address all correspondence to Responsible Senior Official.



<u>STATE/REGION</u>	<u>STATE EMERGENCY DIRECTOR</u>	<u>RESPONSIBLE SENIOR OFFICIAL</u>
Panama Canal Commission IV	Mr. Thomas P. Strider Chief, Emergency Preparedness General Services Bureau Panama Canal Commission APO Miami, FL 34 (912) 226-1761	Same
Pennsylvania III	Mr. John L. Patten Director, Pennsylvania Emergency Management Agency Transportation and Safety Bldg., B-151 Harrisburg, PA 17120 (717) 783-8150	Lt. Gov. William W. Scranton Chairman, Pennsylvania Emergency Management Council State Capitol Harrisburg, PA 17120 (717) 787-3300
Puerto Rico II	Mr. Juan E. Lopez Director, Office of Civil Defense P.O. Box 5127 San Juan, PR 00906 (809) 724-0124	Same
Rhode Island I	Mr. Santo Amato Executive Director, Rhode Island Emergency Management Agency State House Providence, RI 02903 (401) 421-7333	Maj. Gen. John W. Kiely The Adjutant General and Director, Rhode Island Emergency Management Agency Armory of Mounted Commands 1051 North Main Street Providence, RI 02904 (401) 277-2100
South Carolina IV	Col. Joshua P. Moore Director, South Carolina Emergency Preparedness Div. Office of the Adjutant General 1429 Senate Street Columbia, SC 29201 (803) 758-2826	Maj. Gen. T. Eston Marchant The Adjutant General Lambert C. Dennis Office Bldg. 1000 Assembly Street Columbia, SC 29201 (803) 748-4200
South Dakota VIII	Mr. Robert Gunderson Director, Div. of Emergency and Disaster Services Department of Military Affairs EOC-State Capitol Pierre, SD 57501 (605) 733-3231	Maj. Gen. Ronald Williamson The Adjutant General and State Director of Civil Defense State Capitol Pierre, SD 57501 (605) 733-5340
Tennessee IV	Mr. Lacy E. Suiter Director, Tennessee Emergency Management Agency 3041 Sidco Drive Nashville, TN 37204 (615) 252-3300	Maj. Gen. Carl Wallace The Adjutant General 3041 Sidco Drive Nashville, TN 37204 (615) 252-3001

<u>STATE/REGION</u>	<u>STATE EMERGENCY DIRECTOR</u>	<u>RESPONSIBLE SENIOR OFFICIAL</u>
Texas VI	Mr. Robert Lansford Chief, Division of Disaster Emergency Services Texas Department of Public Safety Box 4087, North Austin Station Austin, TX 78773 (512) 465-2000 - X3700	Col James B. Adams Director, Texas Department of Public Safety and Division of Disaster Emergency Services Box 4087, North Austin Station Austin, TX 78773 (512) 465-2000 - X3700
Trust Territory of the Pacific IX	Mr. Jay Lather Emergency Planner, Office of Planning and Statistics Office of the High Commissioner Trust Territory Headquarters Saipan, Mariana Islands 96950 011-670-9333	Same
Utah VIII	Ms. Lorayne Tempest Director, Division of Comprehensive Emergency Management Department of Public Safety 1543 Sunnyside Avenue Salt Lake City, UT 84108 (801) 533-5271	Mr. Larry E. Lunnen Commissioner, Department of Public Safety 4501 South, 2700 West Salt Lake City, UT 84119 (801) 533-4900
Vermont I	Mr. George Lowe Deputy Director, Office of Civil Defense Department of Public Safety Waterbury State Complex 103 S. Main Street Waterbury, VT 05676 (802) 244-8721	Mr. Paul R. Philbrook Commissioner, Department of Public Safety and Director of Civil Defense Waterbury State Complex 103 S. Main Street Waterbury, VT 05676 (802) 244-8718
Virginia II	Mr. Addison Slayton Acting State Coordinator Office of Emergency and Energy Services 310 Turner Road Richmond, VA 23225 (804) 323-2899	Mr. Andrew G. Fogarty Secretary, Department of Transportation Ninth Street Office Bldg., Sixth Floor Richmond, VA 23219 (804) 786-7639
Virgin Islands II	Mr. Louis P. Tirell Director, Civil Defense and Emergency Services P.O. Box 1208 St. Thomas, VI 00801 (809) 774-2244	Same

<u>STATE/REGION</u>	<u>STATE EMERGENCY DIRECTOR</u>	<u>RESPONSIBLE SENIOR OFFICIAL</u>
Washington X	Mr. Hugh Fowler Director, Department of Emergency Services 4220 East Martin Way Olympia, WA 98504 (206) 459-9191	Same
West Virginia III	Mr. Mannie R. Griffith Director, West Virginia Office of Emergency Services State Capitol Complex, EB 80 Charleston, WV 25305 (304) 348-5380	Same
Wisconsin V	Mr. Gordon Reese Deputy Administrator, Division of Emergency Government Department of Administration P.O. Box 78655 Madison, WI 53707 (608) 266-3232	Ms. Doris Hanson Administrator, Department of Administration P.O. Box 7864 Madison, WI 53707 (608) 266-1741
Wyoming VIII	Mr. Williard A. Reiling Coordinator, Wyoming Disaster and Civil Defense P.O. Box 1709 Cheyenne, WY 82001 (307) 777-7566	Maj. Gen. James L. Spence The Adjutant General P.O. Box 1709 Cheyenne, WY 82001 (307) 772-6233

PART FOUR: CHECKLISTS FOR SPECIFIC HAZARDS

## 12. CHECKLISTS FOR SPECIFIC HAZARDS

### 12.1 Introduction

This part of the planning has been prepared to aid the fire chief in developing guidelines for specific types of disasters.

Guidelines for each type of disaster are arranged in a logical sequence which follows the order in which events might occur or the sequence in developing a plan. The reader should remember that these guidelines are not plans for specific disaster types, rather, they are a series of recommended items to consider when developing a plan.

No specific style has been adopted for presenting these guidelines nor are they complete. Each guideline has been designed to address the needs of the fire chief. These needs are based on the IAFC's disaster planning survey. Therefore, the planner will find some guidelines general in nature and others more specific.

In order to make these guidelines effective, each fire chief should check the department's existing or newly-adopted plan and identify the presence of key points contained in this section. In this way, the guidelines can be used as checklists for convenience.

If, during the preparation of a specific disaster plan, one is not familiar with the operational problems, behavior of the disaster type, or simply wants to learn more about the cause and effects of natural or man-made disasters, refer to the bibliography. For example, if the hazard analysis reveals that the specific jurisdiction has the potential for an earthquake and personnel are not familiar with characteristics of earthquakes, refer to the bibliography for suggested readings on this subject.

The Integrated Emergency Management concept specifies that, to the extent possible, disaster planning is conducted on a functional basis, rather than a type of disaster basis; that is, a generic plan is developed which contains functions common to all types of disasters, then unique

functions associated with specific disaster types are added as required. However, IEMS is not yet fully developed and many fire departments are in a transition period. Therefore, the checklists included in this edition of the Manual are still presented in the "type of disaster" format.

## 12.2 Flood/Water Emergency Checklist

### Definitions

Flood Watch - Conditions that could combine to make a flood possible.

Flood Alert - Conditions have combined to make a flood possible.

Flood is Imminent - Flood is certain to occur.

### Preparatory Period

- \_\_\_ Review and revise the plan for handling a water disaster with the proper authorities.
- \_\_\_ Cooperate in planning with other communities to establish or reaffirm mutual aid agreements.
- \_\_\_ Identify potential water disaster areas. (Consult floodplain map if available.)
- \_\_\_ Notify fire department personnel of potential water disaster areas.
- \_\_\_ Review standard operating procedures for water emergencies.
- \_\_\_ Train fire department personnel in water disaster operations, e.g., water rescue, explosions, gas leak, electrical, cave-ins, sewers.
- \_\_\_ Establish and maintain an inventory of resources and their locations.  
Example: Regular and auxiliary personnel, public and private equipment (boats, helicopters).
- \_\_\_ Notify all fire department personnel of "Flood Watch."
- \_\_\_ Prepare for water, food and electrical shortages.
- \_\_\_ Ensure that fuel requirements for equipment will be met.
- \_\_\_ Notify all fire department personnel of "Flood Alert."
- \_\_\_ Advise news media of fire department plans.
- \_\_\_ Recall off-duty personnel according to standard operating procedures.
- \_\_\_ Assign and inspect boats to be used. Use local Coast Guard auxiliary or waterway patrol officer for inspections.
- \_\_\_ Evacuate all low areas of the community which have potential for water disaster.
- \_\_\_ Notify evacuees to shut off utilities before they leave.
- \_\_\_ Assist with evacuation of ambulatory patients.
- \_\_\_ Secure stations in potential water disaster areas and evacuate.
- \_\_\_ Move all fire fighting equipment to strategic points with access to all parts of the area threatened. (Consider small bridges unreliable for access in most cases.)

### Flood Imminent Period

- \_\_\_ Notify fire department personnel of situation.
- \_\_\_ Require all fire department units to report hazardous situations. (Maintain radio contact.)
- \_\_\_ Call for mutual aid if necessary.
- \_\_\_ Continue fire department operations where possible.
- \_\_\_ Utilize boats and helicopters when other rescue procedures cannot be used.
- \_\_\_ Confine and extinguish all fires where possible.
- \_\_\_ Monitor water supply resources (hydrant pressures).
- \_\_\_ If flood water is to be used for fire protection, it must be monitored constantly for contamination from flammable or combustible liquids.
- \_\_\_ Arrange for dry clothing as required.
- \_\_\_ Establish food service for fire department personnel.
- \_\_\_ Establish sleeping quarters for relocated personnel.

### Flood Receding Period

- \_\_\_ Notify fire department personnel of cresting point.
- \_\_\_ Contain and extinguish all fires as required.
- \_\_\_ Conduct primary and secondary search for victims.
- \_\_\_ Administer inoculations as necessary for waterborne diseases.
- \_\_\_ Reopen closed stations.
- \_\_\_ Assist returning evacuees.
- \_\_\_ Release mutual aid units.
- \_\_\_ Release auxiliary and off-duty personnel.
- \_\_\_ Take inventory.
- \_\_\_ Report losses of equipment. Duty officer should try to keep a running list on the daily log.
- \_\_\_ Critique operation.

### 12.3 Tornado Checklist

NOTE: Tornado warning periods normally are 3 to 15 minutes. Therefore, preparation should take place prior to tornado seasons.

### Preparatory Period

- \_\_\_ Review and revise disaster plan with the proper authorities.
- \_\_\_ Cooperate in planning with other communities to establish mutual aid agreements.
- \_\_\_ Train fire department personnel on tornado disaster operations.
- \_\_\_ Use standard operating procedures as a training guide.  
Example: Clearing streets, search and rescue in collapsed buildings, gas leaks, wire arcing, mass casualties, major conflagrations, water supply shortages.
- \_\_\_ Establish and maintain an inventory of resources and their locations.  
Example: Regular and auxiliary manpower, public and private equipment (especially tires for apparatus damage due to broken glass.)
- \_\_\_ Check condition and operation of chain and rotary saws.

### Tornado Watch Period

- \_\_\_ Notify fire department personnel of situation.
- \_\_\_ Secure all in-service equipment.
- \_\_\_ Prepare for water, food, and electrical shortages.
- \_\_\_ Prepare for breakdown in communications.
- \_\_\_ Example: antennas blown down.
- \_\_\_ Ensure that fuel requirements will be met.

### Tornado Alert

- \_\_\_ Notify fire department personnel of situation.
- \_\_\_ Prepare to take shelter.
- \_\_\_ All fire department units should establish tornado watch from strategic observation points.

### Tornado Strike Period

- \_\_\_ Fire department personnel take shelter.
- \_\_\_ Fire department units report damage to equipment and personnel.
- \_\_\_ Fire department units respond to incidents requiring search, rescue and fire operations, if possible.
- \_\_\_ All off-duty personnel report to duty according to standard operating procedures.
- \_\_\_ All units report damaged areas and extent of damage.
- \_\_\_ Watch for looters and report incidents to police.
- \_\_\_ Request mutual aid units if needed.
- \_\_\_ Assist in shutting off utilities and clearing roads. (Form tree clearing task force groups, clear priority roads first.)
- \_\_\_ Supply food to fire department personnel as needed.
- \_\_\_ Supply fuel to fire department units as needed.
- \_\_\_ Continue operations until all hazardous situations are under control and all areas have been searched for victims.
- \_\_\_ Release mutual aid units.
- \_\_\_ Release off-duty personnel.
- \_\_\_ Take inventory.
- \_\_\_ Report losses.
- \_\_\_ Critique operations.

### 12.4 Hurricane Checklist

#### Preparation Period

- \_\_\_ Review and revise procedures for hurricanes with proper authorities.
- \_\_\_ Cooperate in planning with other communities to establish and reaffirm mutual aid agreements.
- \_\_\_ Identify areas with potential for water disaster.
- \_\_\_ Notify fire department personnel of potential water disaster areas.
- \_\_\_ Review applicable standard operating procedures.
- \_\_\_ Train fire department personnel in high-water and high wind operations.



- Establish and maintain an inventory of resources and their storage locations.  
Example: Regular and auxiliary personnel and public and private equipment (boats).

#### Hurricane Watch Period

- Notify fire department personnel of situation.
- Prepare for water, food, and electrical shortages.
- Prepare for breakdown in communications (antennas blown down).
- Ensure that fuel requirements for fire equipment will be met.

#### Hurricane Alert Period

- Notify fire department personnel of situation.
- Allow fire department personnel to ensure family safety.
- Assign and inspect all boats to be used.

#### Hurricane Imminent

- Notify all fire department personnel of situation.
- Notify news media of fire department plans.
- Recall off-duty personnel according to standard operating procedures.
- Evacuate all areas with water disaster potential.
- Notify evacuees to shut off utilities before they leave.
- Assist with evacuation of ambulatory patients.
- Secure and evacuate all stations with water disaster potential.
- Move all fire fighting equipment to strategic points with access to all parts of the area threatened.

#### Hurricane Strike Period

- All fire department units report hazardous situations.
- Watch for looters. Advise police of incidents.
- Call for mutual aid if necessary.
- Continue fire department operation where possible.
- Utilize boats for rescue.
- Monitor water supply resources (hydrant pressures).
- If flood water is to be used for fire protection, it must be checked for contamination from flammable or combustible liquids.
- Establish food service for fire department personnel.
- Establish sanitation facilities for fire department personnel.
- Establish sleeping facilities as required.

#### Recovery Period

- Notify fire department personnel of situation.
- Contain and extinguish all fires.
- Assist in the clearing of roads. (Assign task force groups for tree-cutting as required. Clear main streets on a priority basis.)  
Example: Streets to hospitals should be cleared first.
- Search for victims.

- \_\_\_ Reopen closed stations.
- \_\_\_ Assist returning evacuees.
- \_\_\_ Assist with temporary morgue operations as required.
- \_\_\_ Release mutual aid units.
- \_\_\_ Flush salt water from all vehicles. (corrosion control)
- \_\_\_ Release auxiliary and off-duty personnel.
- \_\_\_ Take inventory.
- \_\_\_ Report losses.
- \_\_\_ Critique operations.

## 12.5 Earthquake Checklist

### Definition

An earthquake is a shaking or trembling of the crust of the earth caused by underground volcanic forces or the breaking and shifting of rock beneath the surface.

### Background

Earthquakes are relatively unpredictable and strike without warning. They may range in intensity from slight tremors to great shocks and may last from a few seconds to as much as five minutes. They can occur in a series over a period of several days. The actual movement of the ground in an earthquake seldom is the direct cause of injury or death. Most casualties result from falling objects and debris because the shocks can shake, damage or demolish buildings and other structures.

Disruption of communications, along with light and power lines, gas, sewer or water mains can be expected. Earthquakes also may trigger landslides and generate huge ocean waves, each of which can cause great damage.

### Pre-Earthquake Period

- \_\_\_ Participate in long-range planning as a priority rather than short-term response plans. Such long-range activities should include the study of fire engineering, building and fire codes.
- \_\_\_ Participate in adopting local laws designed to aid in long-range planning.
- \_\_\_ Conduct an analysis and develop response plans for (a) identifying groups of people most likely to need special assistance in the event of an earthquake, (b) high hazard areas such as hazardous materials storage facilities, gas pipelines.
- \_\_\_ Examine response patterns and emergency access roads to potential fire and rescue areas; evaluate the possibility of blocked streets and develop alternative routes.
- \_\_\_ Implement long-range planning for fire station design. Improve designs to prevent collapse of stations on fire apparatus. (The Managua, Nicaragua Fire Department lost 65% of its resources when stations collapsed on apparatus.)
- \_\_\_ Equip fire and rescue facilities with emergency generators. (Test generators monthly.)

## Earthquake Period

- Order fire apparatus out of fire stations.
- Implement priority response in the following order:
  - a. Fires, with trapped victims
  - b. Fires, with probability of spread
  - c. Trapped victims
  - d. Large fires, no spread potential
  - e. Medical aids, severe
  - f. Major petroleum, gas leaks
  - g. Small fires, no spread potential
  - h. Medical aids, minor
  - i. General assistance
- Maintain strict security
- Order a "conditions survey" of fire department property.
  - a. Check integrity of buildings
  - b. Check gas, electricity, water, sanitation
  - c. Check emergency generator operation
  - d. Test telephones
  - e. Test apparatus radios
  - f. Test station radios
  - g. Test station sirens
- General Areas Needing Attention
  - a. Adequate personnel, equipment, and support
  - b. Survey critical areas
  - c. Apparatus staging area
  - d. Car pools/buses for personnel assignments
  - e. Sleeping, food, and housing for personnel
  - f. Establish fueling areas
  - g. Relief for personnel
  - h. Sanitation
  - i. Housing
  - j. Food
  - k. Field hospitals
  - l. Fuel
  - m. Maintenance
  - n. Security
  - o. Volunteers
- Assign fire and rescue units to conduct damage survey of the following areas.
  - a. Hospitals
  - b. Schools - if occupied
  - c. Theaters - if occupied
  - d. Large manufacturing plants
  - e. Economical, essential industries
  - f. Chemical plants
  - g. Petroleum facilities
  - h. Water system
  - i. Major shopping centers
  - j. Public assemblies - general
  - k. Major apartment complexes
  - l. Condition of roadways, etc.
  - m. General condition of the city

- Maintain close liaison with city/county emergency command and control.
- Maintain watch for looters and report incidents to police.

#### Post-Earthquake Period

- Prioritize station and apparatus repairs.
- Schedule personnel shifts to permit personal repairs and reconstruction of homes.
- Establish secondary damage assessment program using first due companies to inspect damage not surveyed in primary survey.
- Establish follow-up fire safety inspection to correct existing deficiencies.
- Develop a plan for implementing fire codes, fire engineering in newly-constructed or reconstructed buildings.
- Develop inspection program for remodeling, renovation projects.
- Critique fire and rescue operations.

### 12.6 Drought Checklist

#### Definition

A drought is a prolonged period of dryness which may pose extreme fire protection problems for both urban and rural fire departments. The following checklist provides suggested guidelines for developing a drought disaster plan.

#### Pre-Drought Period

- Develop definitions of fire danger ratings, e.g., high, moderate, low. Check with forest service, weather bureau for local variations in terms.
- Develop standard operating procedures for posting fire watches.
- Check local fire ordinances for authority to ban open burning, cross-country motorcycle and off-road vehicle travel, open flame, camp fires, etc.
- As the fire chief, have the authority and a system to implement immediate emergency ordinances for fire prevention.
- Work out mutual aid agreement with water transport companies and vehicles.
- Work out agreements with water department to determine minimum fire flow requirements during peak usage levels.
- Prepare press releases, film clips, public information releases for news media on fire safety.
- Inspect fire breaks for clearance.
- Inspect access roads.
- Inspect portable drafting tanks.
- Train personnel on drafting operations.

#### Drought Period

- Implement emergency ordinances banning open burning, off-road vehicle travel.
- Implement fire patrols in high-risk areas.
- Use strategic observation points.

- Implement public fire safety announcements.
- Ban water use for unnecessary functions, e.g., watering lawns, washing automobiles, hydrants for recreation.
- Increase fire apparatus response to high-risk areas. Respond with water tankers when necessary.

## 12.7 Blizzard/Winter Storm Checklist

### Pre-Storm Season Preparations

- Organize snowmobile and ski emergency rescue and medical teams.
- Contact the National Weather Service and establish definitions, especially "heavy snow warnings" and "cold wave warnings" that pertain to the area.
- Provide local media with winter storm fire safety rules, winter automobile travel considerations, etc.
- Reaffirm mutual aid agreements with other agencies such as ski patrols, Civil Air Patrol, amateur radio operators, four-wheel drive vehicle owners, farmers with tractors, contract snow removal.
- Check telephone numbers and addresses of persons included in the previous guidelines.
- Determine locations and amounts of snow fencing, sand, salt, containers, snow shovels, and install and service as required.
- Designate and place markers for plowing parking lots, driveways, fire hydrants, life occupancy dwellings.
- Develop newspaper articles, press releases, video tapes for the media on fire safety, heart attack, exposure, clearing hydrants, etc.
- Inventory snow tires, chains, shovels, anti-freeze, oil and gasoline, and stock as necessary.
- Review standard operating procedures for recall, placing chains on vehicle tires, tactics, etc. Update as required.
- Check on hydrant maintenance.

### Storm Warning Period

- Check protective clothing: ear protection, gloves, socks, sweatshirts, face protection (ski masks), salves and ointments for frostbite. Maintain extra equipment.
- Warn personnel about signs of frostbite and exposure.
- Encourage plenty of rest, offer flu shots to avoid absenteeism.
- Have personnel prepare their personal affairs, e.g., make sure family has heating oil, gas, food is stocked, automobiles are winterized.
- Place sand, snow shovels, extra de-icing fluid (also in spray cans) on apparatus.
- Drain pumps, booster lines (train on priming).
- Check all marking lights on apparatus.
- Add moisture evaporative to mixture in fuel tanks.
- Scheduled training should include winter pumping, priming, cold weather first aid.
- Arrange for extra food in the station.

## Storm Period

- \_\_\_ Obtain only official information on highway and street closings and immediately pass information to the personnel.
- \_\_\_ Rotate personnel from emergency scenes to lessen fatigue, tension, flare-up of tempers.
- \_\_\_ Change work schedules to fit needs.
- \_\_\_ Stay abreast of weather forecasts.
- \_\_\_ Adopt double response patterns.
- \_\_\_ Obtain four-wheel drive vehicles as necessary. (Consider using farm vehicles).
- \_\_\_ Arrange for snow plow response to all scenes - furnish them with a portable radio.
- \_\_\_ Run an engine company with an ambulance.
- \_\_\_ Have off-duty personnel bring extra food, clothing for prolonged stay.
- \_\_\_ Staff stations with extra personnel.
- \_\_\_ Issue public assistance requests for clearing hydrants.
- \_\_\_ Place sleds/toboggans on apparatus for use with stokes litter.
- \_\_\_ Get police approval for use of snowmobiles on streets and sidewalks.
- \_\_\_ Be alert for excess snow accumulation and possible collapse of roofs, buildings. Caution citizens of hazards associated with clearing roofs.
- \_\_\_ Drive with headlights on at all times.
- \_\_\_ Check for drifts against exit doors.
- \_\_\_ Check for blocked fire lanes, plowed-over post indicator valves, standpipe connections.
- \_\_\_ Check tire pressures. (Tire pressure decreases with cold weather.)
- \_\_\_ Drain accumulated condensation from air brake system at beginning of cold weather and check periodically.

## Thawing Period

- \_\_\_ Check portable pumps.
- \_\_\_ Develop pumping task forces.
- \_\_\_ Check boots for holes.
- \_\_\_ Train for flooding, water rescue, ice rescue.
- \_\_\_ Review flood disaster plan, standard operating procedures.

## 12.8 Transportation Accident Checklist

### Pre-Disaster Period

- \_\_\_ Conduct hazard analysis by surveying:
  - a. Types of transportation in the jurisdiction
    - 1) Aircraft
    - 2) Boat/Ship
    - 3) Passenger Train
    - 4) Subway
    - 5) Bus

b. Examine transportation routes

- 1) Aircraft flight patterns
- 2) Aircraft final approach patterns to local airports
- 3) Train routes, track locations
- 4) Bus travel routes; consider school buses and through traffic
- 5) Shipping lanes, barge traffic, canals

c. Check transportation accident records to determine most frequent accident areas. Consult police department records, Federal Railroad Administration, U.S. Coast Guard Port Commander, Federal Aviation Administration.

Establish areas most likely to have a transportation disaster.

Examine fire department resources available for responding to a potential transportation disaster.

Consider:

- a. Triage, emergency medical supplies for mass casualty (will there be enough to treat 100 to 500 passengers?)
- b. Morgue capabilities, body markers, tags, bags
- c. Special extrication equipment
- d. Underwater rescue capabilities
- e. Breathing apparatus capable of subway rescue, e.g., 45 to 60 minutes
- f. Communications for long-term field operation

Develop special operations plans as necessary for individual disaster types. Stress command post operations, communications, triage, and mutual aid.

### Disaster Period

Implement disaster plan and conduct normal fire and rescue functions and adapt as the situation requires.

Establish clearly marked command post.

Establish necessary communications links with support agencies.

Implement triage, emergency medical operations plan.

Establish well-controlled perimeter and restrict unauthorized entry.

Preserve evidence for National Transportation Safety Board, U.S. Coast Guard, Federal Aviation investigators.

Hold briefings for the media on a regular basis. Implement a plan for a one-time tour of the accident scene.

Establish staging areas for mutual aid companies, helicopters, etc.

Maintain good field records (see appendix 1.), keep track of expenses, overtime, belongings of survivors, body part locations, etc.

Implement a body recovery plan for fatalities.

Consider:

- a. Additional body bags
- b. Markers for body location, personal identification, investigation, morgue location
- c. Temporary morgues, e.g., refrigerated vehicles, closed areas
- d. Insect spray at the accident site during summer months

## Post-Disaster Operations

- Evaluate supply levels and resupply as necessary.
- Hold a debriefing for fire and rescue personnel. Make psychological counseling available for personnel.
- Critique operations and develop recommendations for improvement.

## 12.9 Hazardous Materials Accident Checklist

### Pre-Disaster Period

- Conduct hazard analysis. Survey:
  - a. Transportation modes
    - 1. Air
    - 2. Rail
    - 3. Water
    - 4. Pipeline
  - b. Fixed facilities
    - 1. Factories
    - 2. Bulk storage
    - 3. Shipping and transfer
- Conduct a survey of hazardous materials:
  - a. Location
  - b. Type
  - c. Quantity
- Evaluate resources available for dealing with specific locations and classes (flammable gases, corrosives, etc.) of hazardous materials.
- Refer to transportation checklist for suggested surveys of transportation modes.
- Determine deficiencies in individual department operating procedures.
- Develop hazardous materials training program.
- Develop standard operating procedures for hazardous materials incidents.
- Establish mutual aid agreements with industries for:
  - a. Special fire protection
  - b. Suppression protection
  - c. Special container patch kits
  - d. Technical experts
  - e. Spill control and clean-up equipment personnel.
- Develop pre-emergency response plans for potential transportation incidents and fixed facilities. Consider:
  - a. Quantity of hazardous material involved
  - b. Health problems
  - c. Fire danger
  - d. Reactivity with suppression agents
  - e. Potential dispersion areas
  - f. Life and property and environmental exposures
  - g. Control/shutoff valve locations
  - h. Special equipment required



## Disaster Period

- Determine the presence of hazardous materials. Consider:
  - a. Transportation vehicles
  - b. Dumps/waste sites
  - c. Construction areas
  - d. Fixed facilities
- Estimate the potential harm to life, property and the environment. Consider:
  - a. Container size
  - b. Shape
  - c. Pressure
  - d. Quantity
- Choose a response objective and consider options. Protect life exposure as necessary. Consider:
  - a. Intervention for immediate life-threatening rescue, if required
  - b. Withdrawal from area for identification of material involved and further assessment
  - c. Total withdrawal and evacuation to an estimated safe area.
- Identify the material involved. Look for:
  - a. Use levels
    - 1) Industrial sites (higher concentration potential)
    - 2) Home use (weaker concentrations)
  - b. Containers
    - 1) Sizes
    - 2) Shapes
    - 3) Configurations
  - c. Container marking systems
    - 1) Special color codings
    - 2) Placards/labels (D.O.T., NFPA 704, United Nations Number)
    - 3) Stenciled tank identification numbers.
    - 4) Company signs, product names
  - d. Documents
    - 1) Waybill
    - 2) Consist
    - 3) Invoices
    - 4) Supply/Stock Inventory Lists
- Contact manufacturer, shipper, etc., as required [by contacting the Chemical Transportation Emergency Center (CHEMTREC 800-424-9300)].
- Re-evaluate emergency with new information.
- Monitor progress throughout the incident.

## Post-Disaster Period

- Conduct medical evaluation of personnel as necessary.
- Evaluate resources, inventory supplies, equipment damage.
- Critique emergency operations.
- Review, revise, and update standard operating procedures, disaster plan, mutual aid agreements as required.
- Implement training program for correcting deficiencies.

## 12.10 Civil Disturbance Checklist

The following important points should be considered in developing plans for civil disturbance operations.

### Fire Problems

- Police problems should be watched closely for possible development into fire problems.
- Time interval between police and fire problems may be a matter of an hour or days.
- Helicopters or small planes are effective in evaluating the dimensions and direction of the fire problem. Activate plans for their use.

### Command Posts and Staging Areas

- Number required based on local fire problem(s).
- Define probable command post areas in advance.
- Site selection based on:
  - a. Ample parking space
  - b. Wide roads for maneuvering
  - c. Accessibility
  - d. Communications capabilities
  - e. Living accommodations
  - f. Cooking facilities
  - g. Toilet facilities
  - h. Command operations rooms
  - i. Secure area
  - j. Near trouble areas
  - k. Fuel dispensing facilities
  - l. Mechanical repair facilities

### Communications

- Prepare communications plan and determine where supplementary communications are available. Civil Defense may be helpful.
- Obtain extra portable radio units. These are at a premium at such times.
- Inform all personnel of any special signals to be employed to designate civil disturbance.
- Keep one radio channel clear for operational command purposes. If supplementary channels are not available presently, start a program to obtain them.
- Messages must be screened and those of extreme importance should be transmitted by telephone (not radio) for security reasons.
- A system of hand signals should be used by department officers to direct fire fighters.

## Personnel

### Relief and Food

- Plan for relief of crews on a regular basis to avoid personnel fatigue.
- Do not overlook local authorities. They probably can be of great assistance.

### Recall

- Plan for speedy recall of off-duty personnel and a staffing schedule for splitting two-piece companies and activating reserve apparatus.
- Plan for re-assignment of personnel in salvage companies, etc., that might be unnecessary during such times.

### Protection

- Identify protective measures and procedures for implementation during times of tension.
- Notify police to obtain armed guards for active units.
- Order all personnel to wear full protective equipment, including face shields, if available.
- Warn all personnel not to operate alone in the event of trouble; officers should pay particular attention to pump operators and fire fighters at hydrants.
- Order all personnel and officers to wear same colored protective clothing and helmets when disorder signal is received. This includes chief officers.
- Prepare an evacuation plan for stations in critical areas.
- Assign an emergency medical technician or a fire fighter with good first-aid knowledge to each piece of apparatus.

### Mutual Aid

- Do not call mutual aid until after own personnel are recalled.
- Advise all mutual aid companies that may be called of impending plans and their places in those plans.
  - a. Type of equipment which may be needed.
  - b. Double staffing for units to provide for relief.
  - c. Location for response to convoy directions.
- Advise mutual aid companies where to assemble in convoys for later response to pre-determined assembly areas.

### Operations

- Set forth on-site operational activities to be implemented if a civil disturbance emergency occurs.
- Provide written documentation of authorities and responsibilities for key participants in the plan.
- Provide basic guidance for gathering intelligence and activating communications necessary to make timely and effective decisions.

- Provide maps and inventories necessary to make effective decisions and take effective action.
- Identify priorities to be considered in local fire defense.
- Fire service and law enforcement agencies must work together to solve the problems.
- Frequent briefings must be held with federal, state, county, and local law enforcement agencies to keep them aware of any possible conditions that might arise.
- Coordinate all plans with local police, sheriff, and National Guard, and jointly plan police protection for all task force units.
- Plan a basic task force of two pumpers, one ladder, and one chief officer for operations. A third pumper may be substituted if ladder company shortage exists.
- All task force companies immediately should remove axes, bars, nozzles, and other equipment from exterior of apparatus and place them in compartments or otherwise under cover.
- All open cab apparatus should be protected immediately by means of shields previously prepared and in readiness.
- Provide mutual aid and command arrangements necessary for effective fire defense.
- Do not commit available forces until certain of need. Make certain armed guards are on hand.
- Decide whether or not to respond to obvious false alarms.
- Warn all officers not to respond with emergency lights or sirens where mobs are gathered.
- Order fire station doors closed and maintain only a minimum of illumination.
- Chief officers may have to move from one location to another because of the numbers of fires.
- When an area is considered unsafe, fire alarms should not be answered in that area.
- Units attacked upon responding to an alarm should leave at once.
- Task forces should respond to, and return from, all calls as a group.
- Use hit-and-run tactics.
  - a. Task forces should attempt to knock down and black out fires as quickly as possible with heavy streams. Small fires should be attacked with preconnected lines to maintain mobility.
  - b. Keep personnel together and operate as closely as possible to apparatus.
  - c. Keep hose lines to minimum length.
  - d. Use straight streams for best reach.
  - e. Make maximum use of wagon pipes, turrets, etc. If mutual aid is required, make your call immediately.
  - f. Do not overhaul or consider salvage.
  - g. Never let personnel operate alone - at least two people should always be with the apparatus.
  - h. When fire is blacked out, pick up and get out of the area as quickly as possible.
- Establish policies for training personnel as necessary to cope with potential local fire threat.

## 12.11 Conflagration Checklist

### Pre-Disaster Period

- \_\_\_ Conduct hazard analysis.
  - a. Identify potential conflagration areas
  - b. Conduct conflagration analysis
  - c. Evaluate fire suppression capabilities
  - d. Evaluate water supplies, fire flow capabilities
- \_\_\_ Establish mutual aid agreements with:
  - a. Fire departments for personnel and apparatus
  - b. Railroads for flat car transportation of apparatus
  - c. Water tankers such as tank trucks, cement mixers
  - d. Demolition teams
- \_\_\_ Review laws, ordinances for the authority to demolish public property in emergencies.
- \_\_\_ Develop drafting areas at parks, streams, lakes, swimming pools.
- \_\_\_ Participate in long-range planning to eliminate conflagration hazards.
  - a. Construct fire breaks
  - b. Develop fire codes for preventing conflagration hazards.
- \_\_\_ Develop standard operating procedures for emergency response to conflagration.
- \_\_\_ Survey hose thread sizes and adapt as necessary.

### Conflagration Potential Period

During periods of prolonged hot, dry weather with high winds.

- \_\_\_ Implement "no burning" laws.
- \_\_\_ Increase inspections in hazard areas.
- \_\_\_ Use fire patrols in hazard areas.
- \_\_\_ Increase response levels for reported fires in hazard areas.

### Conflagration Period

- \_\_\_ Determine fire spread potential.
- \_\_\_ Immediately call for additional resources as required.
- \_\_\_ Contact water distribution facilities to increase water supply to affected area.
- \_\_\_ Evacuate areas well in advance of the fire.
- \_\_\_ Request additional communications equipment as required.
- \_\_\_ Use helicopters for observations.
- \_\_\_ Maintain entry and exit control points.
- \_\_\_ Use natural fire breaks for defense lines well in advance of the fire.

### Post-Conflagration Period

- \_\_\_ Inventory resources and restock as necessary.
- \_\_\_ Critique fire service operations.
- \_\_\_ Review, revise, and update disaster plan and standard operating procedures as required.
- \_\_\_ Participate in fire engineering and code review as required.

## 12.12 Mass Evacuation (Enemy Attack/Nuclear Incident) Checklist

### **I. Introduction**

This checklist has been prepared for fire and rescue services that may be engaged in mass evacuations because of enemy attack or nuclear incident. With some modification, this list may be used for mass evacuation of communities threatened by technological or natural hazards.

The user should consider this checklist as a basic tool for conducting mass evacuations, rather than as a plan. Events appear in a logical sequence; however, they may be restructured to fit local needs and existing procedures.

### **II. Definition of Terms for Risk and Host Area**

Risk Area - A pre-determined area with potential, during nuclear confrontation, of receiving a nuclear strike. This area also includes the area surrounding the target because of the direct effects of nuclear explosion (radiation, heat, and wind).

Host Area - A pre-determined area with low potential, during nuclear confrontation, of receiving a nuclear strike. This area is out of possible direct nuclear effects of an on-target strike of the risk area, but is not without risk of fallout radiation.

Preparatory Period - From time of notification until time of evacuation.  
Duty - Preparation for evacuation.

Relocation (Evacuation) Period - From time of initial evacuee movement until the evacuation is complete.  
Duty - Assist in evacuation.

Maintenance Period - From time evacuation is completed until time of return of evacuees.  
Duty - Maintain required service level.

Relocation (Return) Period - From time of return of evacuees until time return is complete.  
Duty - Assist in return of evacuees.

Gear Down (Crisis Terminated) Period - From time of return of evacuees until notification crisis is terminated.  
Duty - Resume normal operations.

Attack (Time Zero) Period - From time of notification or sighting of attack until notified attack is over.  
Duty - Reduce or terminate operations, take shelter.

### Preparatory Period Risk and Host Area Checklist

- Retrieve, review and adopt relocation plans to be used.
- In cooperation with the risk community and designated officials, determine the areas that risk the chance of direct nuclear effects.

- Coordinate planning with potential risk areas for mutual aid operations.
- Notify and advise fire department personnel of the situation.
- Take inventory of all fire department resources.
- Establish and maintain an up-to-date list of active and auxiliary personnel.  
Example: This list should include location of on and off-duty personnel and qualifications.
- Maintain reserve fuel supplies at maximum.
- Prepare for shortages of water, electricity and natural gas.  
Example: Preparation includes storage of bottled water, emergency generators, and portable heaters for the station.
- Prepare for supplying food to fire department personnel in the case of continuous operations.
- Obtain and train supplemental emergency operations center personnel.
- Review requirements for fire prevention and control.  
Example: Develop new fire prevention policies, emergency ordinances and fire response procedures to fit the new needs during and after evacuation.
- Prepare to support and assist evacuees.
- Prepare for the handling of mass casualties.
- Prepare for receiving and using risk area personnel and units.
- Review fire department personnel requirements for in-place shelter.
- Drill fire department personnel on nuclear hazards and protection procedures.
- Prepare to notify evacuees, through media, of fire prevention and how to report an emergency.

#### Relocation (Evacuation) Period

- Notify and advise fire department personnel of situation.
- Assign extra personnel to emergency operations center.
- Assign rescue and fire equipment to cover receiving areas of evacuees.
- Assist law enforcement agency with traffic control as necessary.
- Assist with reception of ambulatory evacuees.
- Notify evacuees, through media, of fire prevention and how to report an emergency.
- Use arriving risk area fire department evacuee equipment and manpower.
- Institute new fire department prevention policies, emergency ordinances, and modify fire department response procedures.

#### Maintenance Period

- Notify and advise fire department of situation.
- Use any arriving risk area fire department evacuee manpower and equipment.
- Continue modifying fire department prevention policies and response procedures.
- Continue notifying evacuees of how to report an emergency.

### Attack (Time Zero) Period

- \_\_\_ Notify personnel of time until attack.
- \_\_\_ All operations continue.
- \_\_\_ Example: Host area is out of direct effects of nuclear strike; therefore, it should be affected only by fallout unless strike is off-target.
- \_\_\_ Emergency operations center notifies when attack is over.
- \_\_\_ All fire department units report damage.
- \_\_\_ Fire department units maintain operations where and when possible.
- \_\_\_ Notify personnel of fallout areas and contaminated areas where possible.
- \_\_\_ All fire department units check area for fallout and avoid contaminated areas, then report information to emergency operations center.
- \_\_\_ Emergency operations center recalls all personnel if possible.
- \_\_\_ Emergency operations center provides assistance on request to risk area.

### Relocation (Return) Period

- \_\_\_ Notify and advise fire department personnel of situation.
- \_\_\_ Release supplemental risk area fire department equipment and manpower.
- \_\_\_ Continue modifications of fire department policies and response procedures.
- \_\_\_ Reassign fire and rescue equipment to cover staging areas of returning evacuees.
- \_\_\_ Assist law enforcement agency with traffic control as necessary.
- \_\_\_ Assist with the movement of ambulatory people.
- \_\_\_ Continue notification of evacuees of how to report an emergency.

### Gear Down (Crisis Terminated) Period

- \_\_\_ Notify and advise fire department personnel of situation.
- \_\_\_ Resume normal operations.
- \_\_\_ Take inventory of fire department resources.
- \_\_\_ Assess losses or gains of resources in terms of numbers and costs.
- \_\_\_ Critique the operation.

### Risk Area Checklist

#### Preparatory Period

- \_\_\_ Retrieve, review and adapt relocation plan to be used.
- \_\_\_ In cooperation with the host area and designated officials, determine the areas that risk the chance of direct nuclear effects.
- \_\_\_ Coordinate planning with potential host areas for mutual aid operations.
- \_\_\_ Notify and advise fire department personnel of the situation.
- \_\_\_ Take inventory of all fire department resources.



- Establish and maintain an up-to-date list of active and auxiliary personnel.  
Example: This list should include location of on and off-duty personnel and qualifications.
- Develop a 12-hour work schedule to be implemented. (Twelve-hour shifts are the longest shifts advisable during an emergency of this magnitude.)
- Maintain reserve fuel supplies at maximum.
- Prepare for shortages of water, electricity, and natural gas.  
Example: Preparation includes storage of bottled water, emergency generators and portable heaters for the station.
- Prepare for supplying food to fire department personnel due to continuous operations or lack of open stores.
- Arrange for repairs of equipment in the station or at local point.
- Obtain and train supplemental emergency operations center personnel.
- Prepare to put in service backup emergency operations center.  
Example: Back-up emergency operations center will take over all operations in the event the risk area emergency operations center cannot function. Back-up emergency operations center should be located at edge of risk area boundary.
- Review requirements for fire prevention and control.  
Example: Develop new fire prevention policies, emergency ordinances and fire response procedures to fit the new needs during and after the time of evacuation.
- Prepare to support and assist evacuees.
- Prepare for handling of mass casualties.
- Determine the equipment and personnel to move to host areas with evacuees to assist host areas.
- Review fire department personnel requirements for in-place shelters and fringe of risk area shelters.  
Example: A nuclear strike on target in risk area will destroy a high percentage of fire department resources; therefore, to reduce losses, fire department personnel and equipment should be evacuated to shelters on edge of risk area if time permits.
- Drill fire department personnel on nuclear hazards and protection procedures.
- Notify public, through media, of fire prevention tips for securing homes before evacuating.  
Example: Instruct public, through media, of how to shut off water, natural gas, and electrical appliances.

#### Relocation (Evacuation) Period

- Notify and advise fire department personnel of situation.
- Assign extra personnel to emergency operations center.
- Assign rescue and fire equipment to cover staging areas for evacuation of area.
- Assist law enforcement agency with traffic control as necessary.
- Assist in evacuation of ambulatory residents.
- Establish and maintain a fire safety patrol with the in-service fire department units and law enforcement units.

- Assign fire department personnel to strategic viewing points in area for fire watches.
- Institute procedure for handling transportation of sick and injured to host area hospitals.
- Institute procedure for handling, transportation, and storage of bodies.

#### Maintenance Period

- Notify and advise fire department of situation.
- Reduce manpower to normal in man emergency operations center and transfer extra manpower to emergency operations center at edge of risk area.
- Place back-up emergency operations center in service.
- Release pre-determined units and personnel to assist host areas.
- Establish 12-hour work shifts.
- Continue modifying fire department prevention policies and fire department response procedures.
- Assign fire department personnel to in-place shelter protection, as well as shelter protection at fringe of risk area.
- Arrange for regular garbage pickups for fire stations.
- Arrange for feeding of fire department personnel.
- Arrange for personal sanitation.

#### Attack (Time Zero) Period

- Notify personnel of the time until attack.
- All operations stop and personnel are evacuated from risk area.
- Risk emergency operations center evacuates to back-up emergency operations center, if no time in place shelter is taken.
- Fire department stations sound station warning devices if part of the Civil Defense network.
- Fire department personnel evacuate with equipment to fringe of risk area shelter, if no time in place shelter is to be taken.
- Equipment in 2 psi (pounds per square inch) or more overpressure area is to be left outside. It has been determined that if equipment is left in buildings with potential for exposure to nuclear blast pressure of 2 psi or greater, equipment is safer left outside.
- Back-up emergency operations center notifies when attack is over.
- All fire department personnel report equipment losses.
- Back-up emergency operations center advises where possibility of radiation conditions exist.
- All fire department units check areas for fallout and avoid contaminated areas, then report information to emergency operations center.
- Back-up emergency operations center recalls all personnel if possible.
- Resume fire department operations where and when possible.
- Back-up emergency operations center can request assistance from host areas.

### Relocation (Return) Period

- \_\_\_ Notify and advise fire department personnel of situation.
- \_\_\_ Release equipment personnel originally from risk area.
- \_\_\_ Reduce personnel in backup emergency operations center and transfer extra personnel to main emergency operations center.
- \_\_\_ Place back-up emergency operations center out of service.
- \_\_\_ Return to normal work shifts.
- \_\_\_ Continue modification of fire department policies and response procedures.
- \_\_\_ Reassign fire and rescue equipment to receiving areas of evacuees.
- \_\_\_ Assist law enforcement agency with traffic control as necessary.
- \_\_\_ Assist with reception of ambulatory people.

### Gear Down (Crisis Terminated) Period

- \_\_\_ Notify and advise fire department personnel of situation.
- \_\_\_ Resume normal operations.
- \_\_\_ Take inventory of fire department resources.
- \_\_\_ Assess losses or gains of resources in terms of numbers and cost.
- \_\_\_ Critique the operation.

## APPENDICES

## APPENDIX A

### IAFC/FEMA DISASTER PLANNING SURVEY

In 1979, as part of FEMA-sponsored Disaster Preparedness Project, the IAFC conducted a survey of chiefs of individual fire departments in order to obtain information about the nature and extent of emergency preparedness planning. The questions focused on two major areas:

- o the chiefs' perception of disaster planning problems in the community; and
- o the level and extent of fire department disaster planning.

This chapter presents highlights of the survey's results and a summary of responses to the survey questions. Readers wishing more information about the survey should refer to DISASTER PLANNING GUIDELINES FOR FIRE CHIEFS. That document contains a discussion of the survey methodology and an extensive interpretation of the findings of the research.

#### I. HIGHLIGHTS OF SURVEY RESULTS

##### FIRE CHIEFS' PERCEPTIONS OF DISASTER PLANNING PROBLEMS

###### o The Emergency Preparedness Director/Coordinator:

- The vast majority of chiefs indicated that their department's relationship with the EM director was good or very good, a finding which fails to support the commonly held belief that fire department/EM relationships are unsatisfactory. Most chiefs feel that the EM director has a good understanding of disaster-related fire and rescue issues.
- In both planning and practice, the role of the EM director is seen as one of coordination and liaison with other agencies, rather than direction.

###### o Plans Development and Disaster Preparedness:

The major problems cited were:

- Lack of interest by municipal officials and other agencies, both public and private;

- Inability of support agencies, such as mayor's or city manager's office, to accept positions in the chain of command;
- Limited resources for planning;
- Inadequate cooperation with other organizations; and
- Lack of a common mutual aid radio frequency.

#### LEVEL AND EXTENT OF PLANNING

- o Coordinated planning between fire departments and primary EM agencies, such as EMS and police was good.
- o Planning coordination with secondary support agencies, such as sanitation and utilities, was poor.
- o Planning coordination was also weak with non-municipal organizations, such as the Red Cross, local hospitals, state agencies and local news media.
- o The vast majority of departments reported mutual aid plans for fire and rescue services.
- o Most plans clearly spelled out command and control functions, including legal authorities.
- o Most plans included an emergency medical operations plan for triage, treatment and mass transportation of the injured.
- o The most serious planning deficiency was the lack of fire service planning for large-scale evacuations.
- o With respect to implementing plans, those for natural disasters were used more than those for man-made disasters.

## II. SUMMARY OF RESPONSES

### DESCRIPTION OF RESPONDENTS

#### State Distribution

	<u>RESPONSES</u>			<u>RESPONSES</u>	
	<u>% OF</u>	<u>NO.</u>		<u>% OF</u>	<u>NO.</u>
	<u>TOTAL</u>			<u>TOTAL</u>	
Alaska	0.7	5	Mississippi	0.4	3
Alabama	1.0	7	Montana	0.7	5
Arkansas	0.4	3	North Carolina	2.2	16
Arizona	1.4	10	North Dakota	0.6	4
California	11.3	81	Nebraska	0.7	5
Colorado	1.4	10	New Hampshire	1.0	7
Connecticut	2.7	19	New Jersey	3.4	24
D.C.	0.1	1	New Mexico	0.8	6
Florida	4.3	31	Nevada	0.7	5
Georgia	1.0	7	New York	2.9	21
Hawaii	0.3	2	Ohio	7.6	54
Idaho	1.1	8	Oklahoma	0.8	6
Iowa	0.7	5	Oregon	2.2	16
Illinois	8.1	58	Pennsylvania	3.9	28
Indiana	1.8	13	Rhode Island	0.8	6
Kansas	2.0	14	South Carolina	1.4	10
Kentucky	0.7	5	Tennessee	1.1	8
Louisiana	1.4	10	Texas	3.2	23
Massachusetts	7.1	51	Utah	1.0	7
Maryland	1.7	12	Virginia	1.4	10
Maine	1.3	9	Washington	0.7	5
Michigan	3.6	26	Wisconsin	2.7	19
Minnesota	2.5	18	West Virginia	0.1	1
Missouri	2.4	17	Wyoming	0.4	3
			TOTAL	100%	702

#### Population

0 - 9,999	13.6	97
10,000-24,999	30.3	216
25,000-49,999	26.8	191
50,000-99,999	14.1	101
100,000-249,999	7.4	53
250,000-499,999	3.6	26
500,000-999,999	3.6	26
1 million plus	0.6	4

#### Type of Department

Fully Paid	50.1	358
Mostly Paid	19.6	140
Mostly Volunteer	16.5	118
Fully Volunteer	13.7	98

## PERSONNEL AND APPARATUS

	<u>Number</u>
Active personnel available for response response to emergency incidents (includes paid, volunteers, and reserves)	103,562
Emergency medical personnel (EMT, paramedic, other EMS)	31,638
Engine companies (one NFPA Class A or B pumper; two-piece engine companies should be counted as two pumpers)	7,969
Truck companies	1,847
Rescue companies (light and heavy)	928
Fire department emergency medical/ambulance units	1,379

## EMERGENCY PREPAREDNESS DIRECTOR

	<u>Responses</u>	
	<u>% of</u>	<u>Total</u>
	<u>Number</u>	
Are you an emergency preparedness director (or coordinator, civil defense director, or similar title), i.e., the person who is primarily responsible to coordinate and lead in developing civil preparedness?		
YES	28.4	201
NO	71.6	507
Is the position of emergency preparedness director full-time?		
YES	32.9	231
NO	67.1	471
If the emergency preparedness director is a part-time job, what is the person's full-time occupation?		
Fire and rescue services	32.9	150
Mayor, city/county manager, staff	16.7	76
Law enforcement, police, sheriff	8.6	39
Retiree	8.1	37
Real estate or other sales	1.5	7
Public works or utilities	4.8	22
Skilled trades (electrician, mechanic)	3.5	16
Business persons	9.4	43
Other	14.5	66



	Responses	
	% of	Total
		Number

If the emergency preparedness director is employed by the fire department, what is the individual's rank?

Chief officer (chief, deputy assistant, district, battalion)	84.5	147
Operations officer (captain, lieutenant, sergeant)	5.2	9
Firefighter	2.9	5
Civilian	7.5	13

How would you rate your department's relationship with the emergency preparedness director?

Very good	66.7	459
Good	27.8	191
Poor	5.5	38

How would you describe the role of your local civil defense? (More than one choice checked.)

<u>Planning</u>		
Directs	17.8	121
Coordinates	61.5	418
Liaison with other agencies	40.6	276
Other	9.6	482
<u>In Practice</u>		
Direct	22.0	106
Coordinates	51.5	248
Liaison with other agencies	38.8	187
Other	11.8	57

Does your fire department conduct meetings at least once a year with local emergency preparedness director?

YES	67.8	477
NO	32.2	227

Do you feel the emergency preparedness director has the basic understanding of fire and rescue service problems as they relate to disaster planning?

YES	80.9	560
NO	19.1	132

Responses	
% of	
Total	Number

# EMERGENCY MANAGEMENT PLANNING

As the chief for your jurisdiction, how would you rank the need for the local government emergency/disaster plan for:

## International Crisis/Enemy Attack

High priority	31.2	220
Moderate priority	40.1	283
Low priority	28.3	203

## Peacetime Disasters

High priority	75.5	529
Moderate priority	21.5	151
Low priority	3.0	21

Does your fire department currently maintain a written disaster plan for:

International crisis/enemy attack	YES	44.5	309
	NO	55.5	386
Peacetime disaster	YES	80.5	562
	NO	19.5	136

Was the fire department plan developed solely by fire department personnel?

YES	34.2	213
NO	65.8	410

If agencies other than the fire department participate in the development of your plan, identify the agencies.

Emergency preparedness/civil defense	YES	77.1	263
	NO	22.9	78
Local police	YES	78.4	240
	NO	21.6	66
State police	YES	82.6	76
	NO	17.4	16
Emergency medical services	YES	75.9	176
	NO	24.1	56
National Guard	YES	82.2	60
	NO	17.8	13

		<u>Responses</u>	
		<u>% of</u>	<u>Number</u>
		<u>Total</u>	
Public utilities	YES	82.2	120
	NO	17.8	26
Mayor/manager's office	YES	79.5	186
	NO	20.5	48
Water department	YES	81.6	155
	NO	18.4	35
Sanitation department	YES	83.8	109
	NO	16.2	21
American Red Cross	YES	78.6	125
	NO	21.4	34
Local Hospitals	YES	78.2	158
	NO	21.4	34
State Department of Transportation	YES	82.4	42
	NO	17.6	9
State government	YES	81.9	77
	NO	18.1	17
Local news media	YES	81.0	94
	NO	19.0	22
Military	YES	82.7	43
	NO	17.3	9
Federal agencies	YES	80.9	55
	NO	19.1	13
Other	YES	86.7	39
	NO	13.3	6

In your opinion, does your jurisdiction have the potential for the following disasters?

Water disaster/dam burst/flash floods	YES	73.2	497
	NO	26.8	182
Earthquake/mudslides	YES	43.1	275
	NO	56.0	363
Wind storms/tornados/hurricanes	YES	84.2	577
	NO	15.8	108
Winter storms/blizzards	YES	75.2	510
	NO	24.8	168

		<u>Responses</u>	
		<u>% of</u>	<u>Total</u>
			<u>Number</u>
Drought	YES	55.5	329
	NO	44.6	265
Other natural disasters	YES	52.2	47
	NO	47.8	43
Enemy attack	YES	59.4	373
	NO	40.6	255
Nuclear incident	YES	61.6	393
	NO	38.4	245
Hazardous materials accident	YES	93.1	637
	NO	6.9	47
Transportation accident	YES	91.2	614
	NO	8.8	59
Conflagration	YES	79.8	501
	NO	20.2	127
Other man-made disasters	YES	50.8	31
	NO	49.2	30
Does your plan specifically address:			
Mutual aid for fire and rescue services	YES	93.6	627
	NO	6.4	43
The chain of command for all levels in a disaster	YES	88.6	573
	NO	11.4	74
An EMS plan for triage, treatment and mass transportation of injured	YES	83.6	546
	NO	16.4	107
Partial evacuations/temporary relocations	YES	77.2	498
	NO	22.8	147
Total evacuations	YES	40.9	257
	NO	59.1	372
Legal authority for individuals/agencies to command disaster operation	YES	83.7	522
	NO	16.3	102

		<u>Responses</u>	
		<u>% of</u>	
		<u>Total</u>	<u>Number</u>
Have you used your disaster plan during classroom training exercises for:			
Simulated enemy attack	YES	17.9	112
	NO	82.1	513
Simulated peacetime disaster	YES	69.2	457
	NO	30.8	203
Have you implemented your plan on a "live" training exercise within the past five years?			
	YES	64.4	438
	NO	35.6	242
Have you implemented your plan during an actual disaster within the past five years?			
	YES	40.4	298
	NO	56.0	379
If your plan has been activated within the last five years, indicate what type of disaster: (Percentages of total response)			
Water disaster	41.2	Earth movement	3.9
Winter blizzard	57.5	Wind storm	37.7
Drought	1.6	Other natural	11.7
Hazardous materials transportation	44.7	Hazardous materials fixed facility	27.4
Other transportation	31.6	Conflagration	22.6
Other man-made	13.2		
Did the use of the plan during one of the above disasters result in its being updated?			
	YES	71.8	275
	NO	28.2	108
When was the last time your plan was reviewed by the fire department for necessary changes or revisions?			
Within the last year	59.8	368	
Two to three years ago	24.9	153	
Three to five years ago	7.0	43	
More than five years ago	8.3	51	

Would you be willing to share your disaster planning knowledge and information with other fire chiefs who have similar problems?

	<u>Responses</u>	
	<u>% of</u>	<u>Number</u>
	<u>Total</u>	
YES	98.6	570
NO	1.4	8

## APPENDIX B

### SELECTED EMERGENCY MANAGEMENT RESOURCES\*

#### FEDERAL RESOURCES

<u>AGENCY</u>	<u>AREA OF EXPERTISE</u>
Federal Emergency Management Agency 500 C Street, S.W. Washington, D.C. 20472 (202) 237-0565	Emergency Management
National Emergency Training Center National Fire Academy Emmitsburg, MD 21727 (800) 638-9600	Fire Training, Mass Casualties, Hazardous Materials, Training, Planning
Norfolk Naval Shipyard Code 870 Portsmouth, VA 23709 (804) 393-3335	Military Shipboard Fires, and Training
Uniformed Services University of the Health Sciences Room 2060 4301 Jones Bridge Road Bethesda, MD 20814 (301) 295-3722	Hazardous Materials, Training, Emergency Medical Services
Office of Assistant Secretary of Defense (Health Affairs) Room 3E279 Pentagon Washington, DC 20301 (202) 694-4157 (202) 694-1418	Mass Casualties, Hazardous Materials, Biological and Chemical Agents, International Health, Disaster Preparedness, Medical Readiness, Resource Identification
<u>NATURAL DISASTERS</u>	
National Weather Service Room 504 8060 Thirteenth Street Silver Springs, MD 20910 (301) 427-7658	Floods
National Hurricane Center 1320 South Dixie Highway Coral Gables, FL 33146 (305) 666-4612	Hurricanes (Atlantic Coast)

\* Adapted from Formulating Public Policy in Emergency Management Course Book and Resource Manual for Public Officials, FEMA Emergency Management Institute, Fall 1983.

AGENCY

AREA OF EXPERTISE

MASS CASUALTIES

National Severe Storms  
Forecast Center (NSSFC)  
601 East Twelfth Street  
Kansas City, MO 64106  
(816) 374-3427

Tornadoes

Office of International Health  
Health Services Administration  
U.S. Public Health Service  
Rockville, MD 20857  
(301) 443-6152

Planning, Evaluation  
International Health  
Hospital Disaster  
Preparedness

Academy of Health Sciences  
Fort Sam Houston, TX 78234  
(512) 221-4325

Training

Headquarters, Brook Army  
Medical Center  
Fort Sam Houston, TX 78234  
(512) 221-5288  
(512) 221-3017

Planning, Training  
and Education

National Institute of Mental  
Health  
Center for Mental Health  
Studies of Emergencies  
5600 Fishers Lane, Room 6C12  
Rockville, MD 20857  
(301) 443-1910

Research grants to states  
for crisis counseling



# STATE LISTING

<u>STATE</u>	<u>AGENCY</u>	<u>AREAS OF EXPERTISE</u>
Alabama	Alabama State Fire College 2015 McFarland Boulevard Tuscaloosa, AL 35401 (205) 348-5241	Fire Training
	Fire Marshal's Office 445 South McDonough Street Montgomery, AL 36130 (205) 832-5844	Fire Training and Investigation
		<u>HAZARDOUS MATERIALS</u>
	Division of Solid and Hazardous Waste Alabama Department of Public Health 434 Monroe Street Montgomery, AL 36130 (205) 832-6728	Technical Assistance
	Division of Solid and Hazardous Waste P.O. Box 532 Bessemer, AL 35021 (205) 923-7171 (O) (205) 426-1864 (H)	Household Pest Control Pesticide Spray
	Industrial Maintenance Cleaning Contractors, Inc. P.O. Box 569 Bessemer, AL 35021 (205) 428-0621 (O) (205) 428-4084 (H)	Cleaning Chemicals
	Greater Mobile Industrial Association c/o Shell Chemical Company P.O. Box 525 Axis, AL 36505 (205) 675-2450, Ext. 204	Community Mutual Aid Technical Assistance
	Alabama Water Improvement Commission Public Health Services Building Montgomery, AL 36130 (205) 277-3630	Response

<u>STATE</u>	<u>AGENCY</u>	<u>AREAS OF EXPERTISE</u>
	Division of Radiological Health Alabama Department of Public Health State Office Building 434 Monroe Street Montgomery, AL 36130 (205) 832-5990	Radiological Incidents Technical Assistance, Regulations
Alaska	Alaska Department of Education Office of Adult and Continuing Education Pouch F, State Office Building Juneau, AK 99811 (904) 465-4685	Fire Training
	State Fire Marshal Suite 11 5333 Fairbanks Street Anchorage, AK 99502 (907) 272-2406	Fire Prevention and Investigation
	Radiological Health Program Department of Health and Social Services Pouch H-01 Juneau, AK 99811 (907) 465-3019	Radiological Incidents Technical Assistance Regulations
Arizona	Office of State Fire Marshal P.O. Box 19070 1601 West Jefferson Street Phoenix, AZ 85005 (602) 255-5062	Fire Training, Prevention and Investigation
	Phoenix Fire Department Room 465 620 West Washington Street Phoenix, AZ 85504 (602) 256-6595	Fire, hazardous materials, radiological incidents, mass casualties, training, and response
	Arizona Radiation Regulatory Agency Suite 2 925 South 52nd Street Tempe, AZ 85281 (602) 765-4845	Radiological incidents, Technical Assistance Regulations
	Tucson Fire Department P.O. Box 27210 Tucson, AZ 85720 (602) 791-4511	<u>HAZARDOUS MATERIALS</u> Training

<p>Arizona Corporation Commission 1200 West Washington Street Phoenix, AZ 85007 (602) 255-3316</p>	<p>Technical Assistance</p>	
<p>Overleys, Inc. 650 West Southern Avenue Mesa, AZ 85202 (602) 962-6638</p>	<p>Transportation and Waste Cleanup</p>	
<p>Center for Professional Development College of Engineering and Applied Sciences Arizona State University Tempe, AZ 85287 (602) 965-1740</p>	<p>Mass casualties Training Programs</p>	
<p>Tucson Airport Authority Tucson International Airport Tucson, AZ 85706 (602) 294-3411</p>	<p>Aviation Accidents</p>	
<p>Arkansas</p>	<p>Arkansas Fire Academy P.O. Box 3048 East Camden, AR 71701 (501) 574-1521</p>	<p>Fire Training</p>
<p>State Fire Marshal 3 Natural Research Drive P.O. Box 5901 Little Rock, AR 72215 (501) 224-3103</p>	<p>Fire Prevention and Investigation</p>	
<p>Office of Emergency Services Civic Center 200 East Eighth Street Pine Bluff, AR 71601 (501) 535-5649</p>	<p>Radiological Incidents Technical Assistance</p>	
<p>Division of Environmental Health Protection Bureau of Environmental Health Services Arkansas Department of Health 4815 West Markham Street Little Rock, AR 72201 (501) 661-2301</p>	<p>Hazardous materials, Radiological incidents, Technical Assistance</p>	
<p>Energy Systems Company P.O. Box 1975 El Dorado, AR 71730 (501) 863-7173</p>	<p>Hazardous materials, Technical Assistance</p>	

California

Office of Emergency Services  
P.O. Box 9577  
Sacramento, CA 95832  
(916) 427-4285

Hazardous materials,  
radiological incidents,  
mass casualties, fire,  
man-made and natural  
disasters, planning,  
technical, assistance,  
response, & training

California Specialized  
Training Institute  
P.O. Box G  
Camp San Luis Obispo, CA 93406  
(805) 544-7100

Man-made and natural  
disasters  
Training Programs

Office of State Fire Marshal  
Suite 800  
7171 Bowling Drive  
Sacramento, CA 95823  
(916) 427-4199

Fire Prevention suppression,  
Investigation &  
Training

Los Angeles Fire Department  
200 North Main Street  
Los Angeles, CA 90012  
(213) 485-6100

Hazardous materials,  
mass casualties,  
training, planning,  
and response

Ryland Research, Inc.  
5290 Overpass Road, Suite 231  
Santa Barbara, CA 93111  
(805) 967-2339

Analysis, Planning,  
Training, and Research  
Assistance

HAZARDOUS MATERIALS

San Francisco Fire Department  
260 Golden Gate Avenue  
San Francisco, CA 94102  
(415) 861-8000, Ext. 341

Training, response

Apartment 301  
380 Esplanada  
Pacifica, CA 94044  
(415) 359-1592

Technical Assistance

South County Industrial  
Emergency Council  
c/o South County Fire District  
666 Elm Street  
San Carlos, CA 94070  
(415) 578-8011, Ext. 41

Training, Regional  
Coordination

Gary A. Tompkins and  
Associates  
235 West McArthur Boulevard  
Oakland, CA 94611  
(415) 652-5115

Technical Assistance

San Clemente Fire Department  
100 Avenida Presidio  
San Clemente, CA 92672  
(714) 492-5105

Planning, Training,  
Response

Sacramento Fire Department  
Room 3 Response  
915 I Street  
Sacramento, CA 95814  
(916) 449-5266

Training

MASS CASUALTIES

Suite 305  
5469 Kearny Villa Road  
San Diego, CA 92123  
(714) 268-0851

Psychological Impact  
of Large-Scale  
Disasters

University Safety Office (STO)  
University of Southern California  
University Park  
Los Angeles, CA 90007  
(213) 743-6443

Planning

Contra Costa County  
Consolidated Fire District  
2010 Geary Road  
Pleasant Hill, CA 94523  
(415) 939-3400

Training  
Response

Aviation Safety Consultants  
26901 Beatrice Lane  
Los Altos Hills, CA 94022  
(415) 941-1299

Planning, Aviation  
Accidents

Emergency Medical Services  
Authority  
1600 9th Street  
Sacramento, CA 95814  
(916) 322-2300

Technical Assistance,  
Regulations, Response  
and Planning

Radiologic Health Section  
State Department of  
Health Services  
714 P Street  
Sacramento, CA 95814  
(916) 322-2073

Radiological incidents  
Technical Assistance  
Regulations

Colorado

Colorado Department of Health  
4210 East Eleventh Avenue  
Denver, CO 80220  
(303) 320-8333

Radiological Incidents,  
Hazardous materials,  
Technical Assistance,  
Regulations, Reactor  
Emergency Response  
Training

Division of Disaster and  
Emergency Services  
Camp George West  
Golden, CO 80401  
(303) 279-2511, Ext. 242

Aviation Safety Consultants  
31218 King Valley West  
Conifer, CO 80433  
(303) 838-5000

Fire Service Training  
State of Colorado  
12600 West Sixth Avenue  
Golden, CO 80401  
(303) 988-6160, Ext. 320

Colorado Search and Rescue  
2415 East Maplewood Avenue  
Littleton, CO 80121  
(303) 798-2438  
(303) 794-2304

Natural Hazards Research and  
Applications Information Center  
Institute of Behavioral Science  
No. 6  
Campus Box 482  
University of Colorado  
Boulder, CO 80309  
(303) 492-6818

Colorado Training Institute  
1001 East 62nd Avenue  
Denver, CO 80216  
(303) 289-4891

Training Division  
Colorado Highway Patrol  
1500 Golden Road  
Golden, CO 80401  
(303) 279-2511

Bureau of Fire Prevention  
Denver Fire Department  
745 West Colfax Avenue  
Denver, CO 80204  
(303) 575-5522

Connecticut

Bureau of State Fire Marshal  
294 Colony Street  
Meriden, CT 06450  
(203) 238-6623

Radiological Incidents,  
Hazardous materials,  
Technical Assistance

Mass Casualties,  
Planning, Aviation  
Accidents

Fire Training

Natural Disasters,  
Training, Response,  
Risk Analysis

Information  
Clearinghouse

#### HAZADOUS MATERIALS

Training Programs

Training

Training Response

Fire Prevention,  
Investigation

George Luther  
294 Colony Street  
Meriden, CT 06450  
(203) 238-6587

Radiation Control  
Department of Environmental  
Protection  
State Office Building  
Hartford, CT 06115  
(203) 566-5668

North Central Connecticut  
Emergency Medical Services  
Council, Inc.  
999 Asylum Avenue  
Hartford, CT 06105  
(203) 522-9111

Central Connecticut State  
College  
1615 Stanley Street  
New Britain, CT 06050  
(203) 827-7230  
(203) 827-7210

Delaware

Delaware State Fire School  
Rural Delivery 2, Box 166  
Dover, DE 19901  
(302) 736-4773

Fire Marshal's Office  
P.O. Box 109  
Dover, DE 19901  
(302) 736-4393

Office of Radiological Health  
Division of Public Health  
Department of Health and  
Social Services  
Jesse S. Cooper Memorial Building  
Capitol Square  
Dover, DE 19901  
(302) 736-4731

District of  
Columbia

Andrews Air Force Base  
1776 CES-DEF  
Washington, DC 20331  
(301) 981-4985

Disaster Services  
American National Red Cross  
Washington, DC 20006  
(202) 857-3722

Fire Training

Radiological incidents,  
Technical Assistance,  
Regulations

MASS CASUALTIES

Planning, Training,  
Evaluation

Training and Education  
Risk Analysis

Fire Training

Fire Prevention and  
Investigation

Radiological incidents,  
Technical Assistance  
Regulations

Fire Aircraft  
Firefighting

Mass Casualties, Re-  
source Identification  
Planning, Response

## HAZARDOUS MATERIALS

American Petroleum Institute  
2101 L Street, N.W.  
Washington, DC 20037  
(202) 457-7000

Technical Assistance,  
Risk Analysis

National Agriculture Chemical  
Association  
1155 15th Street, N.W.  
Washington, DC 20005  
(202) 296-1585

Technical Assistance  
Information Referral  
Pesticide Safety Team  
Network

Bureau of Explosives  
Association of American  
Railroads  
1920 L Street, N.W.  
Washington, DC 20036  
(202) 293-4048

Training, Technical  
Assistance, Response

District of Columbia Fire  
Department  
614 H Street, N.W.  
Washington, DC 20001  
(202) H02-1762

Training  
On-Scene Coordination

Chemical Manufacturers  
Association, Inc.  
2501 M Street, N.W.  
Washington, DC 20009  
(202) 887-1100

Information Referral  
CHEMTREC

Bureau of Occupational and  
Institutional Hygiene  
Environmental Health  
Administration  
Department of Environmental  
Services  
415 Twelfth Street, N.W.  
Washington, DC 20004  
(202) 724-4358

Radiological Incidents,  
Technical Assistance,  
Regulations

## Florida

Miami Police Department  
P.O. Box 016777  
Miami, FL 33101  
(305) 579-6573

Civil Disorders

Bureau of Fire Standards  
and Training  
1501 S.W. Broadway  
Ocala, FL 32670  
(904) 732-0526

Fire Training



State Fire Marshal  
Gaines Street, Room 447  
Laines Building  
Tallahassee, FL 32301  
(904) 488-8368

Fire Prevention and  
Investigation

#### MASS CASUALTIES

Florida Chapter  
American College of  
Emergency Physicians  
Suite 420  
600 Courtland Street  
Orlando, FL 32804  
(305) 628-4800

Training, Evaluation  
Risk Analysis

Lee County Disaster  
Preparedness Agency  
P.O. Box 6926  
Fort Myers, FL 33901  
(813) 335-2111

Training, Multijuris-  
dictional Response  
Coordination, Aviation  
Accidents

Largo Fire Department  
205 Cleveland Avenue, S.W.  
Largo, FL 33540  
(813) 581-6400

Planning, Training

Department of Anesthesiology  
University of Florida, School  
of Medicine  
3650 Country Club Road  
Winter Haven, FL 33880  
(813) 299-3965

Training

Jacksonville Fire Department  
107 Market Street  
Jacksonville, FL 32202  
(904) 739-1862  
(904) 633-5425

Training, Response

#### HAZARDOUS MATERIALS

Hazards, Inc.  
Suite 231  
8282 Western Way Circle  
Jacksonville, FL 32216  
(904) 731-3432

Training Programs,  
Fire and Industrial

Safety Systems, Inc.  
P.O. Box 8463  
Jacksonville, FL 32239  
(904) 725-3044

Training Programs,  
Public Safety and  
Industrial

RADIOLOGICAL INCIDENTS

	Bureau of Disaster Preparedness P.O. Box 1038 Jupiter, FL 33458 (305) 746-4586	Technical Assistance
	Radiological Health Program Department of Health and Rehabilitative Service Ambassador Building Suite 219 Tallahassee, FL 32301 (904) 487-2705	Technical Assistance Regulations
Georgia	State Fire Marshal's Office Martin Luther King, Jr. Drive, S.W. Atlanta, GA 30334 (404) 656-2064	Fire Prevention and Investigation
	Georgia Fire Academy 1112 Clay Street Marietta, GA 30060 (404) 424-7315	Fire Training
	International Federation of Air Line Pilots Association c/o Air Line Pilots Association Suite B200 1007 Virginia Avenue Atlanta, GA 30354 (404) 763-3800 (O) (404) 767-2947 (H)	Aviation Accidents
	Southern Railway System 185 Spring Street, S.W. Atlanta, GA 30303 (404) 529-1917	Hazardous materials Training Programs
	Radiological Health Section Department of Human Resources State Office Building 47 Trinity Avenue Atlanta, GA 30334 (404) 894-5144	Radiological Incidents Technical Assistance Regulations
Hawaii	Noise and Radiation Branch Department of Health P.O. Box 3378 Honolulu, HI 96801 (808) 548-3075	Radiological Incidents Technical Assistance Regulations

Idaho	<p>State Fire Marshal 317 Main Street Boise, ID 83720 (208) 384-2327</p>	<p>Fire Prevention and Investigation</p>
	<p>Fire Service Training 1910 College Boulevard Boise, ID 83725 (208) 385-3303</p>	<p>Fire Training</p>
	<p>Emergency Medical Services Bureau Health Services Division Department of Health and Welfare Statehouse Boise, ID 83720 (208) 334-4245</p>	<p>Mass casualties, Planning</p>
	<p>Radiation Control Section Idaho Department of Health and Welfare Statehouse Boise, ID 83720 (208) 334-4107</p>	<p>Radiological incidents Technical Assistance Regulations</p>
Illinois	<p>Palatine Fire Department 39 East Colfax Palatine, IL 60067 (312) 359-0098</p>	<p>Aviation Accidents</p>
	<p>Abbott Laboratories Abbott Park Department 518 North Chicago, IL 60064 (312) 937-3091</p>	<p>Mass Casualties, Training</p>
	<p>Office of Radiation Safety Department of Nuclear Safety 1035 Outer Park Drive Springfield, IL 62704 (217) 546-8100</p>	<p>Radiological incidents Technical Assistance Regulations</p>
	<p>Office of the State Fire Marshal 3150 Executive Park Drive Springfield, IL 62706 (217) 785-4143</p>	<p>Fire Prevention and Investigation</p>
	<p>Illinois Fire Service Institute 301 South Wright Champaign, IL 61820 (217) 333-3800</p>	<p>Fire Training</p>

Lisle-Woodridge Fire District  
1005 School Street  
Lisle, IL 60532  
(312) 964-2233

Man-made and natural  
disasters  
Training

HAZARDOUS MATERIALS

Illinois Central and Gulf  
Railroad Company  
233 North Michigan Avenue  
Chicago, IL 60601  
(312) 565-1600, Ext. 2488

Training Programs

Process Division, UOP, Inc.  
20 UOP Plaza  
Des Plaines, IL 60016  
(312) 391-2653 (O)  
(312) 437-0830 (H)

Training and Response

Indiana

State Fire Marshal, State  
Training Director  
502 State Office Building  
100 North Senate Avenue  
Indianapolis, IN 46204  
(317) 232-2222

Fire Prevention,  
Investigation, and  
Training

Radiological Health Section  
Indiana State Board of Health  
1330 West Michigan Street  
Indianapolis, IN 46206  
(317) 633-8400

Radiological Incidents  
Technical Assistance  
Regulations

MASS CASUALTIES

Indianapolis International  
Airport  
Indianapolis Airport Authority  
Indianapolis, IN 46241  
(317) 247-6271

Planning, Resource  
Identification

Steven L. Taylor  
Apartment H  
6717 Ramblewood Drive  
Fort Wayne, IN 46815  
(219) 486-1239

Multimedia Exercise  
Simulations

Iowa

State Fire Marshal  
Wallace State Office Building  
523 East Ninth and Grand  
Des Moines, IA 50319  
(515) 281-5821

Fire Prevention and  
Investigation

Fire Service Extension  
Iowa State University  
Fire Service Building  
Ames, IA 50011  
(515) 294-6817

Iowa State University  
215 Nuclear Engineering  
Laboratory  
Ames, IA 50011  
(515) 294-5359

The University of Iowa  
423 North Hall  
Iowa City, IA 52242  
(319) 353-5125

Thermal Gas of Ottumwa  
Brick Plant Road  
Box 732  
Ottumwa, IA 52501  
(515) 294-6817

Office of Disaster Services  
Hoover State Office Building  
Level A29  
Des Moines, IA 50319  
(515) 281-3231

Science Department  
Iowa Central Community College  
1725 Beach Street  
Webster, IA 50595  
(515) 832-1632

Radiological Health and Work  
Related Disease Section  
Department of Environmental  
Quality  
900 East Grand  
Des Moines, IA 50319  
(515) 281-8854

Radiation Protection Office  
The University of Iowa  
311 Grand Avenue  
Iowa City, IA 52242  
(319) 353-3772

Fire, Hazardous Materials,  
Training and Education

Hazardous Materials,  
Radiological incidents,  
Technical Assistance,  
Education

#### HAZARDOUS MATERIALS

Industrial Hygiene Safety  
Hazardous Waste Management  
Biohazard Control

Propane

Risk Analysis, Planning

#### RADIOLOGICAL INCIDENTS

Radiological Monitoring

Technical Assistance  
Regulations

Technical Assistance

Kansas	<p>State Fire Marshal  Mills Building, Suite 203  109 West Ninth Street  Topeka, KS 66612  (913) 296-3401</p>	<p>Fire Prevention and  Investigation</p>
	<p>Division of Continuing  Education  University of Kansas  645 New Hampshire  Lawrence, KS 66044  (913) 864-4467</p>	<p>Fire Training</p>
	<p>Bureau of Radiation Control  Department of Health and  Environment  Forbes Field, Building 740  Topeka, KS 66620  (913) 862-9360, Ext. 284</p>	<p>Radiological Incidents  Technical Assistance  Regulations</p>
	<p>Training Division  Wichita Fire Department  City Hall, Twelfth Floor  455 North Main Street  Wichita, KS 67202  (316) 268-4579</p>	<p>Hazardous Materials,  Training Response</p>
Kentucky	<p>Public Service Occupations Unit  Twenty-First Floor  Capital Plaza Tower  Mero Street  Frankfurt, KY 40601  (502) 564-2326</p>	<p>Fire Training</p>
	<p>Department of Housing,  Buildings &amp; Construction  The 127 Building  Highway 127, South  Frankfurt, KY 40601  (502) 564-3626</p>	<p>Fire Prevention and  Investigation</p>
	<p>Radiation Control Branch  Department for Human Resources  275 East Main Street  Frankfurt, KY 40621  (502) 564-3700</p>	<p>Radiological Incidents  Technical Assistance  Regulations</p>
Louisiana	<p>Director, Firemen Training  Program  Louisiana State University  Pleasant Hall  Baton Rouge, LA 70803  (504) 766-0600</p>	<p>Fire Training</p>

	State Fire Marshal 325 Loyola Avenue New Orleans, LA 70112 (504) 568-5500	Fire Prevention and Investigation
	Nuclear Energy Division State Department of Natural Resources P.O. Box 14690 Baton Rouge, LA 70804 (504) 925-4518	Radiological Incidents Technical Assistance Regulations
Maine	Department of Public Safety 99 Western Avenue Augusta, ME 04333 (207) 289-2481	Fire Prevention and Investigation
	Fire Service Training Education Building, Station 23 Augusta, ME 04333 (207) 289-3367	Fire Training
	Radiological Health Program Department of Human Services 157 Capitol Street Augusta, ME 04333	Fire Training Technical Assistance Regulations
Maryland	Maryland Fire and Rescue Institute University of Maryland College Park, MD 20472 (301) 454-2416	Fire, Mass Casualties, Training, & Planning
	State Fire Marshal 301 West Preston Street Room 1010 Baltimore, MD 21201 (301) 383-2520	Fire Prevention and Investigation
	National Emergency Training Center National Fire Academy Emmitsburg, MD 21727 (800) 683-9600	Fire Training, Mass Casualties, Hazardous Materials, Training, Planning
		<u>HAZARDOUS MATERIALS</u>
	Office of the State Fire Marshal 34 North Philadelphia Blvd. Aberdeen, MD 21001 (301) 272-4650	Technical Assistance Response

Maryland Water Resources  
Administration  
Tawes State Office Building  
Taylor Avenue  
Annapolis, MD 21401  
(301) 251-2443

Oil Spills  
Training  
Response  
Technical Assistance

Anne Arundel County Fire  
Department  
P.O. Box 276  
Millersville, MD 21108  
(301) 768-8723

Training  
Response

Hazardous Materials Safety  
915 Cindy Lane  
Westminster, MD 21157  
(301) 876-6948

Training, On-Scene  
Coordination

Rockville Volunteer Fire  
Department  
380 Hungerford Drive  
Rockville, MD 20850  
(703) 750-4232 (O)  
(703) 762-2080 (H)

Propane and Natural  
Gas, Response

#### MASS CASUALTIES

F.T. Barranco, M.D.  
600 West Northern Parkway  
Baltimore, MD 21210  
(301) 323-4343

Training and Education  
Protocols  
Medical Control

Maryland Institute for Emergency  
Medical Services Systems  
22 South Greene Street  
Baltimore, MD 21201  
(301) 528-5085

Planning, Training  
and Education

Montgomery County Fire and  
Rescue Services  
10025 Darnestown Road  
Rockville, MD 20850  
(301) 279-1836

Mass Casualties,  
Hazardous materials,  
Response and Evaluation

Division of Radiation Control  
Department of Health and  
Mental Hygiene  
O'Connor Office Building  
201 West Preston Street  
Baltimore, MD 21201  
(301) 383-2744

Radiological Incidents,  
Technical Assistance,  
Regulations

Massachusetts Massachusetts Firefighting  
Academy  
59 Horsepond Road  
Sudbury, MA 01776  
(617) 443-8926

Fire Training



	<p>Department of Public Safety 1010 Commonwealth Avenue Boston, MA 02215 (617) 566-4500</p> <p>Manager of Public Safety Logan International Airport Boston, MA 02128 (617) 482-2930, Ext. 398</p> <p>Boston Fire Department 115 South Hampton Street Boston, MA 02118 (617) 442-8000</p> <p>Boston and Maine Corporation North Billerica, MA 01862 (617) 667-8100</p> <p>Boston and Maine Corporation River Road East Deerfield, MA 0134 (413) 772-6448</p> <p>Brigham and Women's Hospital 75 Frances Street Boston, MA 02115 (617) 732-2184</p> <p>Massachusetts Department of Public Health 600 Washington Street Boston, MA 02111 (617) 727-2660</p>	<p>Fire Prevention and Investigation</p> <p>Mass Casualties, Training, Planning, Response</p> <p><u>HAZARDOUS MATERIALS</u></p> <p>Procedures, Technical Assistance</p> <p>Response</p> <p>Response</p> <p><u>RADIOLOGICAL INCIDENTS</u></p> <p>Training, Planning, Hospital Radiological Response</p> <p>Technical Assistance Regulations</p>
Michigan	<p>Michigan Firefighters Training Council 7150 Harris Drive Lansing, MI 48913 (517) 322-1922</p> <p>Department of State Police 7150 Harris Drive Lansing, MI 48913 (517) 322-1924</p> <p>C.O. Hutchenreuther 1000 Knollwood Court Midland, MI 48640 (517) 835-5233</p>	<p>Fire Training</p> <p>Fire Prevention and Investigation</p> <p>Hazardous Materials, Technical Assistance</p>

		<u>RADIOLOGICAL INCIDENTS</u>
	School of Public Health University of Michigan Ann Arbor, MI 48109 (313) 764-0523	Radiation Emergency Management Technical Assistance
	Radiological Services Department Consumer Power Company 1945 West Parnall Road Jackson, MI 49201 (517) 788-2440	Nuclear Reactor Planning Transportation Emergency Medical Services
	Property Detection Department Consumers Power Company 212 West Michigan Avenue Jackson, MI 49201 (517) 788-2485	Training, Fire
	Division of Radiological Health Department of Public Health 3500 North Logan Street P.O. Box 30035 Lansing, MI 48909 (517) 373-1578	Technical Assistance, Regulations
Minnesota	Minnesota Fire/Rescue Service Training Minnesota Department of Education Capitol Square Building Room 533 550 Cedar Street St. Paul, MN 55101 (612) 296-6516	Fire Training
	State Fire Marshal 1246 University Avenue St. Paul, MN 55104 (612) 296-7641	Fire Prevention and Investigation
		<u>RADIOLOGICAL INCIDENTS</u>
	Section of Radiation Control Minnesota Department of Health 717 Delaware Street, S.E. Minneapolis, MN 55440	Technical Assistance Regulations
	Director of Fire Training Minnegasco Minneapolis, MN 55454 (612) 372-5022	Training, Planning
		<u>HAZARDOUS MATERIALS</u>
	Burlington, Northern Railroad 176 East Fifth Street St. Paul, MN 55101 (612) 298-7416	Response

	<p>St. Paul Department of Fire and Safety Services 101 East Tenth Street St. Paul, MN 55101 (612) 224-7811</p> <p>Soo Line Railroad P.O. Box 530 Minneapolis, MN 55440 (612) 332-1261, Ext. 404</p>	<p>Training, Response</p> <p>Planning, Training</p>
Mississippi	<p>Harrison County Civil Defense P.O. Box 68 Gulfport, MS 39501 (601) 864-3843</p> <p>State Fire Marshal P.O. Box 79 Walter Sillers Building Jackson, MS 39205 (601) 354-7711</p> <p>State Fire Academy Route 10, Box 295 Jackson, MS 39208 (601) 932-2444</p> <p>Division of Radiological Health State Board of Health Felix J. Underwood Building P.O. Box 1700 Jackson, MS 39205 (601) 354-6657</p>	<p>Natural disasters, Hazardous materials, Multijurisdictional Response Plans Hurricanes</p> <p>Fire Prevention and Investigation</p> <p>Fire Training</p> <p>Radiological Incidents Technical Assistance, Regulations</p>
Missouri	<p>Missouri State Fire Marshal's Office 621 East Capitol P.O. Box 844 Jefferson City, MO 65102 (314) 751-2930</p> <p>Coordinator, Fire Service Training 1001 Ashland Gravel Road Columbia, MO 65211 (314) 882-4735</p> <p>Agriculture Chemical Division Mobay Chemical Corporation P.O. Box 4913 Kansas City, MO 64120 (816) 242-2000 (816) 242-2582</p>	<p>Fire Prevention and Investigation</p> <p>Fire Training</p> <p><u>HAZARDOUS MATERIALS</u></p> <p>Technical Assistance Response</p>

Penn Valley Community College  
3201 Southwest Trafficway  
Kansas City, MO 64111  
(816) 932-7649

Training and Education

Springfield Fire Department  
235 North Kimbrough Avenue  
Springfield, MO 65804  
(417) 864-1046

Training and Response

Bureau of Radiological Health  
Division of Health  
Department of Social Services  
1511 Christy Lane  
P.O. Box 570  
Jefferson City, MO 65101  
(314) 751-2713

Radiological, Technical  
Assistance,  
Regulations

Lee's Summit Fire Department  
207 South Douglas Street  
Lee's Summit, MO 64063  
(813) 251-2360

Radiological: Monitoring,  
Multimedia Programs,  
Response, Training,  
Manmade disaster: Special  
Rope and Rescue, Amusement  
Parks, Cliff Rescue

#### MASS CASUALTIES

Kansas City Area Hospital  
Association  
4420 Madison  
Kansas City, MO 64111  
(816) 531-5969

Hospital Planning,

Mid-America Regional Council  
Emergency Rescue (MARCER)  
21 West North Street  
Kansas City, MO 64105  
(816) 474-4240

Disaster Planning  
Response

#### Montana

Montana Fire Service Training  
School  
2100 16th Avenue, South  
Great Falls, MT 59405  
(406) 761-7885

Fire Training

Fire Marshal Bureau  
1409 Helena Bureau  
Helena, MT 59601  
(406) 449-2050

Fire Prevention and  
Investigation

Occupational Health Bureau  
Department of Health and  
Environmental Sciences  
Cogswell Building  
Helena, MT 59601  
(406) 449-3671

Radiological, Technical  
Assistance,  
Regulations

B-22

Nebraska

State Fire Marshal  
301 Centennial Mall, South  
Lincoln, NE 68509  
(402) 471-2027

Fire Prevention and  
Investigation

Nebraska Fire Service  
3721 West Cuming  
Lincoln, NE 68524  
(402) 471-2803

Fire Training

Nebraska Forest Service  
1318 Central Avenue  
Nebraska City, NE 68410  
(402) 472-6632 (O)  
(402) 873-9200 (H)

Fire Wildland Fires

Division of Radiological Health  
Department of Health  
301 Centennial Mall, South  
P.O. Box 95007  
Lincoln, NE 68509  
(402) 471-2168

Radiological incidents,  
Technical Assistance,  
Regulations

Union Pacific Railroad  
1416 Dodge Street  
Omaha, NE 68179  
(402) 271-3313

Hazardous Materials,  
Training

Nevada

State Fire Marshal  
1923 North Carson Street  
Suite 236  
Carson City, NV 89701  
(702) 885-4290

Fire Prevention and  
Investigation

University of Nevada-Reno  
Building 370 - STEAD  
Reno, NV 89507  
(702) 972-0785

Fire Training

Las Vegas Fire Department  
400 East Stewart Avenue  
Las Vegas, NV 89101  
(702) 386-6376

Mass Casualties  
Training

Radiological Health Section  
Health Division  
State Department of Human  
Resources  
505 East King Street  
Carson City, NV 89710  
(702) 885-4740

Radiological Incidents,  
Technical Assistance,  
Regulations

New Hampshire	<p>New Hampshire Fire Service  Training, Education &amp; Research  105 Loudoun Road, Building 3  Concord, NH 03301  (603) 271-2661</p> <p>New Hampshire Department of  Public Safety  Hazen Drive  Concord, NH 03301  (603) 271-3336</p> <p>Concord Fire Department  17 South Fruit Street  Concord, NH 03301  (603) 244-0389</p> <p>Bureau of Environmental Health  Division of Public Health  State Department of Health  and Welfare  P.O. Box 148  Concord, NH 03301  (603) 271-4587</p>	<p>Fire Training</p> <p>Fire Prevention and  Investigation</p> <p>Mass Casualties,  Planning, Training</p> <p>Radiological Incidents,  Technical Assistance,  Regulations</p>
New Jersey	<p>New Jersey State Safety Council  New Jersey State College  Suite 820  50 Park Place  Newark, NJ 07102  (201) 642-3123</p> <p>Department of Law and  Public Safety  Division of State Police  State House, First Floor  Trenton, NJ 08625  (609) 292-3730</p> <p>Chemical Leaman Tank Lines  P.O. Box 251  Bridgeport, NJ 08014  (609) 467-1111</p> <p>Division of Environmental Quality  Department of Environmental  Protection  380 Scotch Road  Trenton, NJ 08628  (609) 292-5586</p> <p>ACT Foundation  P.O. Box 911  Basking Ridge, NJ 07920  (201) 766-2273</p>	<p>Fire Training</p> <p>Fire Prevention and  Investigation</p> <p>Hazardous Materials,  Training, Response</p> <p>Radiological Incidents,  Technical Assistance,  Regulations</p> <p>Mass Casualties,  Planning, Resource,  Identification</p>

New Mexico

State Fire Marshal  
P.E.R.A. Building  
P.O. Drawer 1269  
Santa Fe, NM 87501  
(505) 827-2238

P.E.R.A. Building  
P.O. Drawer 1269  
Santa Fe, NM 87501  
(505) 827-2357

Environmental Improvement  
Division  
Department of Health and  
Environment  
P.O. Box 968  
Santa Fe, NM 87503  
(505) 827-5271

F. Mettler, Jr., M.D.  
Assoc. Prof. of Radiology  
University of New Mexico  
Hospital  
Albuquerque, NM 87131  
(505) 277-2161

Department of Radiology  
University of New Mexico Hospital  
Albuquerque, NM 87131  
(505) 843-2260

Los Alamos National  
P.O. Box 1663  
Los Alamos, NM 87545  
(505) 667-4218

New York

Academy of Fire Science  
State of New York  
Office of Prevention & Control  
P.O. Box K  
Montour Falls, NY 14865  
(607) 535-7136

Office of Fire Prevention and  
Control  
152 Washington Avenue  
Albany, NY 12231  
(518) 474-6746

Fire Training

Fire Prevention and  
Investigation

Radiological Incidents,  
Technical Incidents  
Regulations

Preplanning for Reactor  
Emergencies, Training,  
Simulation Exercises,  
Nuclear Power Plant  
Response

Resource Identification

Diagnosis and Treatment  
for Radiation, Contamina-  
tion Exposures

Fire Training

Fire Prevention and  
Investigation

	<p>Louis Ableson, M.D., and  Leon D. Stac, M.D.  John F. Kennedy International  Airport  Building 198  Jamaica, NY 11310  (212) 656-5395</p>	<p>Aviation Accidents</p>
	<p>Bureau of Radiation Control, and  Bureau of Environmental Radiation  State Department of Health  Empire State Building  Tower Building  Albany, NY 12237  (518) 474-2846  (518) 473-3393</p>	<p>Radiological Incidents,  Technical Assistance,  Regulations</p>
	<p>Public Services Programs  State University of New York,  Binghamton  Binghamton, NY 13901  (607) 798-2833</p>	<p>Hazardous Materials,  Training and Education  Technical Assistance</p>
	<p>Chlorine Institute  342 Madison Avenue  New York, NY 10173  (212) 682-4324</p>	<p>Audiovisual Training Kits  Training Programs  Response</p>
North Carolina	<p>North Carolina Department of  Community Colleges  Education Building  Room 176  Raleigh, NC 27611  (919) 733-3345</p>	<p>Fire Training</p>
	<p>Radiation Protection Section  Division of Facility Service  Department of Human Resources  P.O. Box 12200  Raleigh, NC 27605  (919) 733-4238</p>	<p>Radiological Incidents,  Technical Assistance,  Regulations</p>
North Dakota	<p>State Fire Marshal  Lock Box 1292  Bismarck, ND 58502  (701) 224-2434</p>	<p>Fire Prevention and  Investigation</p>
	<p>North Dakota Firemen's  Association  176 First Avenue, NE  Beach, ND 58621  (701) 872-4392</p>	<p>Fire Training</p>



	<p>Division of Environmental Engineering North Dakota Department of Health Missouri Office Building 1200 Missouri Avenue Bismarck, ND 58501 (701) 224-2384</p>	<p>Radiological Incidents, Technical Assistance, Regulations</p>
Ohio	<p>Ohio Fire Academy Division of State Fire Marshal 8894 East Main Street Reynoldsburg, OH 43068 (614) 864-5510</p> <p>Disaster Research Center Ohio State University 128 Derby Hall 154 North Oval Mall Columbus, OH 43210 (614) 422-5916</p> <p>Radiological Health Program Department of Health 264 North High Street P.O. Box 118 Columbus, OH 43216 (614) 466-1380</p> <p>University of Cincinnati Medical Center General Hospital Cincinnati, OH 45267 (513) 872-4282</p>	<p>Fire Prevention, Investigation, and Training</p> <p>Mass Casualties, Resource Identification</p> <p><u>RADIOLOGICAL INCIDENTS</u></p> <p>Technical Assistance Regulations</p> <p>Planning, Training, Biological Radiation Effects, Acute and Late Medical Care for External Radiation and Contamination</p>
Oklahoma	<p>Oklahoma State University Q-2, Room I Stillwater, OK 74074 (405) 624-5727</p> <p>Oklahoma City Fire Department 820 N.W. Fifth Street Oklahoma City, OK 73107 (405) 235-3314</p> <p>State Fire Marshal 400 North Lincoln Boulevard Suite 100 Oklahoma City, OK 73105 (405) 424-4371</p>	<p>Fire Training</p> <p>Fire, Natural Disaster, Hazardous Materials, Radiological Incidents, Planning, Training High rise rescue</p> <p>Fire Prevention and Investigation</p>

	<p>Occupational and Radiological Health Services State Department of Health N.E. Tenth and Stonewall Streets P.O. Box 53551 Oklahoma City, OK 73152 (405) 271-5221</p>	<p>Radiological Incidents, Technical Assistance, Regulations</p>
	<p>Oklahoma Teaching Hospitals Oklahoma State Health P.O. Box 26307 Oklahoma City, OK 73126 (405) 271-5135 (405) 271- 5656 (page)</p>	<p>Mass Casualties Planning, Medical Control</p>
	<p>811 East Tyler Avenue Stillwater, OK 74074 (405) 624-5723</p>	<p>Hazardous Materials Training</p>
<p>Oregon</p>	<p>Portland Fire Bureau 55 S.W. Ash Street Portland, OR 97204 (503) 248-4375</p>	<p>Shipboard Fires Wildlife Fire Control</p>
	<p>State Fire Marshal 103 Labor &amp; Industries Building Salem, OR 97301 (503) 378-4917</p>	<p>Fire Prevention and Investigation</p>
	<p>Fire Standards &amp; Accreditation Board Suite 258 3000 Market Street, N.E. Salem, OR 97310 (503) 378-5210</p>	<p>Fire Training</p>
	<p>Radiation Control Section State Health Division P.O. Box 231 Portland, OR 97201 (503) 229-5797</p>	<p>Radiological Incidents, Technical Assistance, Regulations</p>
	<p>2057 Laurence Street Klamath Falls, OR 97601 (503) 884-7870</p>	<p>Hazardous Materials, Engineering and Hazardous Waste Technical Assistance</p>
	<p>Roosevelt Carter Portland International Airport P.O. Box 3529 Portland, OR 97208 (503) 231-5000</p>	<p>Mass Casualties, Planning</p>

Pennsylvania	<p>Pennsylvania State Firemen's Training School P.O. Box 631 Lewistown, PA 17044 (717) 248-1115</p> <p>State Fire Commissioner 1547 Labor &amp; Industry Building Harrisburg, PA 17120</p> <p>Pennsylvania State Police 1800 Elmerton Avenue Harrisburg, PA 17109 (717) 783-5529</p> <p>Westinghouse Electric Corporation Advanced Reactor Division P.O. Box 158 Madison, PA 15663 (412) 722-5757 (412) 722-5161 (24-hour)</p> <p>Medical Consultation Corporation 9120 Germantown Avenue Philadelphia, PA 19118 (215) 248-0294</p> <p>Bureau of Radiation Protection Department of Environmental Resources P.O. Box 2063 Harrisburg, PA 17120 (717) 787-2480</p> <p>Radiation Management Suite 400 3508 Market Street Philadelphia, PA 19104 (215) 243-2950</p> <p>Department of Radiation Health Graduate School of Public Health University of Pittsburgh Pittsburgh, PA 15261 (412) 647-3495</p> <p>Philadelphia Fire Department Pennypack Street &amp; Delaware River Philadelphia, PA 19124 (215) 335-8060</p>	<p>Fire Training</p> <p>Fire Prevention and Investigation</p> <p>Fire Training</p> <p>Radiological Incidents, Training, Response, Hazardous Materials, Training, response, fire fighting</p> <p><u>RADIOLOGICAL INCIDENTS</u></p> <p>Medical Aspects of Ionizing Radiation</p> <p>Technical Assistance Training</p> <p>Technical Assistance Training</p> <p>Biological Radiation Effects, Acute and Late Medical Management of Radiation Injuries</p> <p><u>HAZARDOUS MATERIALS</u></p> <p>Training</p>
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Chemical Leaman Tank Lines  
102 Pickering Way  
Lionville, PA 19352  
(215) 363-4400

Transportation

Consolidated Rail Corporation  
1528 Walnut Street  
Philadelphia, PA 19102  
(215) 893-6505

Training, Technical  
Assistance, Response

MASS CASUALTIES

Pittsburgh Department of  
Emergency Medical Services  
700 Filbert Street  
Pittsburgh, PA 15232  
(412) 681-5757

Planning, Training

University of Pittsburgh  
Affiliated Residency in  
Emergency Medicine  
113 Lothrop Hall  
Pittsburgh, PA 15261  
(412) 624-1934

Disaster Planning,  
Training and  
Education

Resuscitation Research Center  
University of Pittsburgh  
School of Medicine  
3434 Fifth Avenue  
Pittsburgh, PA 15260  
(412) 624-6735

Cardiopulmonary  
Resuscitation Research  
Training and  
Education

Center for Emergency Medicine  
University of Pittsburgh Health  
Center, Room 113  
190 Lothrop Street  
Pittsburgh, PA 15213  
(412) 624-2858

Training and  
Education

Rhode Island

Rhode Island Junior College  
25 Althea Drive  
Cranston, RI 02920  
(401) 781-6147

Fire Training

Executive Department  
12 Humbert Street  
North Providence, RI 02911  
(401) 277-2335

Fire Prevention  
and Investigation

RADIOLOGICAL INCIDENTS

Defense Civil Preparedness Agency  
State House  
Providence, RI 02903  
(401) 421-7333

Technical Assistance

	<p>Rhode Island Atomic Energy Commission Rhode Island Nuclear Science Ctr. South Ferry Road Narragansett, RI 02882 (401) 789-9391</p>	<p>Planning, Reactor Emergencies</p>
	<p>Division of Occupational Health and Radiation Control Department of Health 206 Cannon Building Davis Street Providence, RI 02908 (401) 277-2438</p>	<p>Technical Assistance, Regulations</p>
South Carolina	<p>Budget and Control Board 1109 Bellevue Street Columbia, SC 29201 (803) 758-2941</p>	<p>Fire Prevention and Investigation</p>
	<p>South Carolina Fire Academy West Columbia, SC 29169 (803) 758-8411</p>	<p>Fire Training</p>
	<p>Bureau of Radiological Health Department of Health and Environmental Control 2600 Bull Street Columbia, SC 29201 (803) 758-8354</p>	<p>Radiological Incidents, Technical Assistance Regulations</p>
South Dakota	<p>118 West Capitol Pierre, SD 57501 (605) 773-3876</p>	<p>Fire Training</p>
	<p>Jim Flippin, Coordinator, Fire Service Training 118 Capitol Building Pierre, SD 57501 (605) 773-3562</p>	<p>Fire Prevention and Investigation</p>
	<p>Office of Air Quality and Solid Waste State Department of Water and Natural Resources Joe Foss Office Building Pierre, SD 57501 (605) 773-3329</p>	<p>Radiological Incidents, Technical Assistance Regulations</p>
Tennessee	<p>State Fire Marshal 40 Tennessee Building Sixth and Church Streets Nashville, TN 37219 (615) 741-3030</p>	<p>Fire Prevention and Investigation</p>

Area Technical School  
1223 S.W. Memorial Boulevard  
Murfreesboro, TN 37130  
(615) 893-4095

Fire Training

Environmental and Safety  
Designs, Inc.  
P.O. Box 34207  
Memphis, TN 38134  
Memphis, TN 38134  
(901) 372-7962

Radiological Incidents,  
Planning for Federal  
Compliance, Training  
Response

RADIOLOGICAL INCIDENTS

Division of Radiological Health  
Department of Public Health  
C2-212 Cordell Hull Building  
Nashville, TN 37219  
(615) 741-7812

Technical Assistance  
Regulations

Radiation Emergency Assistance  
Center/Training Site  
Oak Ridge Associated Universities  
Oak Ridge, TN 37830  
(615) 576-3130

Training, Emergency  
Medical Services

HAZARDOUS MATERIALS

James W. Covington  
1205 Wilmore Road  
Memphis, TN 38117  
(901) 767-5736

Technical Assistance  
Training

Aluminum Company of America  
Alcoa, TN 37701  
(615) 977-3071

Technical Assistance  
Response

Nashville Fire Department  
500 Second Avenue North  
Nashville, TN 37201  
(615) 259-5423  
(615) 327-1300 (Dispatcher)

Training and Response

E.I. Dupont Company  
P.O. Box 27038  
Memphis, TN 27038  
(901) 353-7100 (day)  
(901) 353-7123 (night)  
(901) 353-7228 (cyanide hotline)

Response, Cyanide

Texas

State Fire Marshal  
1110 San Jacinto  
Austin, TX 78786  
(512) 475-4203

Fire Prevention,  
and Investigation

Texas Commission on Fire  
Protection Personnel,  
Standards, and Education  
510 South Congress, Suite 406  
Austin, TX 78704  
(512) 474-8066

Fire Training

Fire Protection Training  
Division  
Texas Engineering Extension Service  
Texas A&M University System  
F.E. Drawer K  
College Station, TX 77843  
(713) 845-7641

Fire Training

Department of Public Safety  
Dallas/Fort Worth Airport  
P.O. Drawer DFW  
Dallas/Ft. Worth Airport, TX 75261  
(214) 574-6720  
(214) 574-5560

Fire Planning,  
Training and  
Response; Mass  
Casualties: Train-  
ing, Planning,  
Response

Bureau of Radiation Control  
Texas Department of Health  
110 West 49th Street  
Austin, TX 78756  
(512) 458-7760

Radiological Incidents,  
Technical Assistance,  
Regulations

Ben Taub General Hospital  
1200 Moursand Avenue  
Houston, TX 77030  
(713) 790-4557

MASS CASUALTIES  
Planning, Training  
and Education

Dallas Fire Department  
1500 Marilla Street  
Dallas, TX 75201  
(214) 670-4516

Planning, Training

Channel Industries Mutual  
Aid Association  
c/o Rohm and Haas Texas, Inc.  
P.O. Box 672  
Deer Park, TX 77536  
(713) 479-2861

HAZARDOUS MATERIALS

Technical Assistance

Shell Oil Company  
P.O. Box 2099  
Houston, TX 77001  
(713) 241-2822  
(713) 241-2489

Oil Products (Fuel),  
Emergency Response,  
Crude Oil Spills  
(Harbor and Rivers),  
Chemical Emergency  
Response, Liquefied  
Petroleum Products

Utah	Utah Technical College at Provo/Orem P.O. Box 1609 1395 North 150 East Provo, UT 84601 (801) 226-5000, Ext. 352	Fire Training
	State Fire Marshal 101 State Capitol Building Salt Lake City, UT 84114 (801) 533-5318	Fire Prevention and Investigation
	Bureau of Radiation and Occupational Health State Department of Health 150 West North Temple P.O. Box 2500 Salt Lake City, UT 84103 (801) 533-6734	Radiological Incidents Technical Assistance Regulations
Vermont	Department of Public Safety Montpelier, VT 05602 (802) 828-2140	Fire Prevention and Investigation
	Vermont Fire Service Training Division of Vermont State Firefighters Association P.O. Box 53 Pittsford, VT 05763 (802) 483-9407	Fire Training
	Rural Delivery 2 Sterling Hill Barre, VT 05641 (802) 479-2307	<u>HAZARDOUS MATERIALS</u>  Resource Identification
	Hazardous Materials Management Section Department of Water Resources and Environmental Engineering State Office Building Montpelier, VT 05602 (802) 828-3395 (802) 828-3100 (Dispatcher)	Technical Assistance
	New England Marine Contractors 1 Mill Street Burlington, VT 05401 (802) 658-1441	Oil Spill and Hazardous Waste Cleanup Transportation



Virginia

Division of Occupational  
and Radiological Health  
Department of Health  
Administration Building  
10 Baldwin Street  
Montpelier, VT 05602  
(802) 828-2886

Radiological Incidents  
Technical Assistance

State Fire Marshal  
Fourth Street Office Building  
205 North Fourth Street  
Richmond, VA 23219  
(804) 786-4751

Fire Prevention and  
Training

Office of Fire Services  
Training  
P.O. Box 706  
Ashland, VA 23005  
(804) 798-1311

Fire Training

Nicholas A. Klimenko  
P.O. Box 1076  
Williamsburg, VA 23187  
(804) 220-3640

Training, Emergency  
Medical Services  
Response

Bureau of Radiological Health  
State Department of Health  
109 Governor Street  
Richmond, VA 23219  
(804) 786-5932

Technical Assistance  
Regulations

Fairfax County Fire and  
Rescue Services  
3081 University Drive  
Fairfax, VA 22030  
(703) 691-3164

Training, Response  
Operations

Arlington County Fire Department  
1900 South Walter Reed Drive  
Arlington, VA 22204  
(703) 558-2909

Training

Norfolk and Western Railway  
Company  
8 North Jefferson Street  
Roanoke, VA 24042  
(703) 981-5353

Training, Response  
Regulations

Washington Gas Light Company  
6801 Industrial Road  
Springfield, VA 22151  
(703) 750-4232 (O)  
(301) 762-2081 (H)

Propane and Natural  
Gas  
Response

RADIOLOGICAL INCIDENTS

HAZARDOUS MATERIALS

MASS CASUALTIES

Craig DeAtley, P.A.  
700 Leeland Street  
Springfield, VA 22151  
(202) 676-4034 (O)  
(703) 256-4407 (H)

Planning, Training  
Evaluation, Response

Emergency Medical Training  
Northern Virginia Community College  
Annandale Campus  
8333 Little River Turnpike  
Annandale, VA 22008  
(703) 323-3409

Training

The Foundation for Fire Safety  
Suite 1508  
1700 North Monroe Street  
Rosslyn, VA 22209  
(703) 276-9222

Planning, Training

EMS Management Institute, Inc.  
207 East Holly Avenue, Suite 200  
Sterling, VA 22170  
(703) 450-5370 (O)  
(703) 450-5813 (H)

Planning  
Resource  
Identification

Old Dominion Emergency  
Medical Services Alliance, Inc.  
4002 Hermitage Road  
Richmond, VA 23227  
(804) 264-3911

Planning, Training  
Evaluation

NATURAL DISASTERS

Alexandria Fire Department  
900 Second Street  
Alexandria, VA 22314  
(703) 838-4600

Planning  
Simulation Exercises

Hampton Fire Department  
22 East Lincoln Street  
Hampton, VA 23669  
(804) 727-5580

Planning  
Earthquakes

Washington

Washington State Fire Marshal  
Insurance Building  
Mail Stop, AQ-21  
Olympia, WA 98504  
(206) 753-3605

Fire Prevention  
and Investigation

Commission for Vocational  
Training Education  
Building 17  
Airindustrial Park  
Olympia, WA 98504  
(206) 753-5679

Boeing Field - King County  
International Airport  
P.O. Box 80245  
Seattle, WA 98108  
(206) 344-7380

Bellingham Fire Department  
1800 C Street, Suite C4  
Bellingham, WA 98225  
(206) 676-6813

Bellevue Fire Department  
666 Bellevue Way, S.W.  
Bellevue, WA 98004  
(206) 455-6892

Radiation Control Section  
(M/S LD-11)  
Department of Social and  
Health Services  
Industrial Park  
Olympia, WA 98504  
(206) 753-3468

West Virginia

West Virginia University  
313 Kwapp Hall  
Morgantown, WV 26906  
(304) 293-2106

State Fire Marshal  
1800 Washington Street, East  
Charlestown, WV 25305  
(304) 348-2191

Industrial Hygiene Division  
State Department of Health  
151 Eleventh Avenue  
South Charleston, WV 25303  
(304) 348-3526

Department of Radiology  
School of Medicine  
West Virginia University  
Morgantown, WV 26506  
(304) 293-3413

Fire Training

Mass Casualties  
Planning, Training  
Response

Mass Casualties,  
Hazardous Materials  
Training, Technical  
Assistance

Hazardous Materials  
Risk Analysis

Radiological Incidents  
Technical Assistance  
Regulations

Fire Training

Fire Prevention  
and Investigation

RADIOLOGICAL INCIDENTS

Technical Assistance  
Regulations

Medical Physics  
Safety  
Monitoring

		<u>MASS CASUALTIES</u>
	Regional Medical Services P.O. Box 89 Fairmont, WV 26554 (304) 366-8764	Planning
Wisconsin	State Fire Marshal 123 West Washington Avenue Madison, WI 53702 (608) 266-1671	Fire Prevention and Investigation
	Wisconsin Board of Vocational and Adult Education Room 701 4802 Sheboygan Avenue Madison, WI 53702	Fire Training
	Radiation Protection Section Division of Health Department of Health and Social Services P.O. Box 309 Madison, WI 53701 (608) 266-1791	Radiological Incidents Technical Assistance Regulations
Wyoming	Department of Fire Prevention and Electrical Safety State Fire Marshal's Office Hathaway Building, Room 117 Cheyenne, WY 82002 (307) 777-7288	Fire Training, Prevention and Investigation
	Radiological Health Services Division of Health and Medical Services Fourth Floor Hathaway Building Cheyenne, WY 82001 (307) 777-6015	Radiological Incidents Technical Assistance Regulations
Canada/ Ontario	Peel Regional Police Force Box 7750 7750 Hurontario Street Brampton, Ontario 76V3W6 (416) 453-3311	Hazardous Materials, Mass Casualties, Evacuation Planning
Canada/ Quebec	International Civil Aviation Organization (ICAO) 1000 Sherbrooke Street West Montreal, Quebec H3A2R2 (514) 285-8180	Aviation Accidents

PARTIAL LIST OF ORGANIZATIONS  
ACTIVE IN DISASTER SERVICES

American National Red Cross  
Disaster Services  
17th and D Streets, NW  
Washington, D.C. 20006  
(202) 857-3722

B'nai B'rith National Headquarters  
1640 Rhode Island Avenue, NW  
Washington, D.C. 20036  
(202) 857-6600

Boy Scouts of America  
P.O. Box 61030  
Dallas/Ft. Worth Airport,  
Texas 75261  
(214) 659-2447

Christian Reformed World Relief  
Committee  
C. Neil Molenaar  
Director, Domestic Programs  
2850 Kalamazoo Avenue, S.E.  
Grand Rapids, MI 49508  
(616) 241-1696

Church of the Brethren Disaster  
Service  
Box 188  
New Windsor, MD 21776  
(301) 635-6464

The Episcopal Church Center  
Presiding Bishops Fund for W.R.  
815 Second Avenue  
New York, New York 10017  
(212) 867-8400

Goodwill Industries of America  
Joseph E. Pouliott  
Executive Vice President  
9200 Wisconsin Avenue, N.W.  
Washington, D.C. 20014  
(301) 530-6500

Lutheran Council in the U.S.A.  
Domestic Disaster Response  
360 Park Avenue, South  
New York, New York 10010  
(212) 532-6350 office in NYC  
(919) 275-4636 home office

Mennonite Disaster Service  
21 South 12th Street  
Akron, PA 17501  
(717) 859- 1151 or 2392

National Catholic Disaster Relief  
Committee  
Holy Redeemer Rectory  
9705 Summit Avenue  
Kensington, MD 20795  
(301) 942-2333

National Conference of Catholic  
Charities, Suite 307  
1346 Connecticut Avenue, N.W.  
Washington, D.C. 20036  
(202) 785-2757

Presbyterian Church in U.S.  
General Assembly Mission Board  
341 Ponce De Leon Avenue  
Atlanta, GA 30308  
(404) 873-1531

The Salvation Army National HDQ  
120 West 14th Street  
New York, New York 10011  
(212) 620-4900

The Salvation Army  
Director of World Service Office  
1025 - 15th Street, N.W. - 2nd floor  
Washington, D.C. 20005  
(202) 833-5577

Seventh-Day Adventists General  
Conference  
6840 Eastern Avenue  
Washington, D.C. 20012  
(202) 723-0800

Seventh-Day Adventists World  
Service  
Potomac Conference  
Box 1208, Gaymont Place  
Staunton, VA 24401  
(703) 886-0771 or 737-3793

Southern Baptist Convention  
Director of Ministries  
Brotherhood Commission  
1548 Poplar Avenue  
Memphis, TN 38104  
(901) 272-2461

Southern Baptist Convention  
Home Mission Board  
Dept. of Christian Social Min.  
1350 Spring Street, N.W.  
Atlanta, GA 30309  
(404) 973-4041

Society of St. Vincent DePaul  
Superior Council of the U.S.  
4140 Lindell Blvd.  
St. Louis, MO 63108  
(314) 371-4980

Society of St. Vincent DePaul  
Col. Arthur S. Lawless  
Council of the United States  
715 Wilmington  
Dayton, OH 45420  
(513) 299-3159  
(January to mid May)

110 Riverside Drive  
Saranac Lake, NY 12983  
(518) 891-4701  
(Mid May to January)

United Methodist Church  
Committee on Relief (UMCOR)  
Paul T. Morton  
Exec. Sec. for Special Min.  
Board of Global Ministries  
475 Riverside Drive, Room 1470  
New York, NY 10027  
(212) 678-6239 or 6290

United Presbyterian Church U.S.A.  
World Relief, Emergency and  
Resettlement Service  
475 Riverside Drive, Room 1268  
New York, NY 10027

Volunteers of America  
340 West 85th Street  
New York, NY 10024  
(212) 873-2600

Volunteers of America  
Lt. Col. Robert N. Coles  
P.O. Box 398  
Hagerstown, MD 21740  
(301) 739-4431

Volunteers of America  
Southern Regional Director  
433 Metairie Road  
Metairie, LA 70005  
(504) 837-2652

## SELECTED PUBLICATIONS

### BIBLIOGRAPHIES

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- Cochran, Anita. A Selected, Partially Annotated Bibliography of Recent (1975-76) Natural Hazards Publications. Boulder, Colorado: Natural Hazards Research and Applications Information Center, 1977.
- Cochran, Anita and Katherine Torres. Flash Flood Warnings Bibliography. Boulder, Colorado: Natural Hazards and Applications Information Center, April 1977.
- Hahl, Robert G. Research Report Number 24, DCPA Fire Research Bibliography DCPA-RE-24. DCPA (U.S. Government), January 1976.
- Morton, David R. A Selected, Partially Annotated Bibliography of Recent (1977-78) Natural Hazards Publications. Boulder, Colorado: Natural Hazards Research and Applications Information Center, 1979.
- Morton, David. Directory of Sources for Films and Other Visual Materials on Natural Hazards and Their Mitigation. Boulder, Colorado: Natural Hazards Research and Applications Information Center, 1978.
- Countermeasures/Volume 1 - 1964-1975. Springfield, Virginia: National Technical Information Service, December 1977.
- National Technical Information Service. Disasters: Effects and Countermeasures, Volume 2, 1976 - October 1978. Springfield, Virginia: National Technical Service, November 1978.
- Publications Part A. Columbus, Ohio: Disaster Research Center, May 1979.
- Quarantelli, E.L. and Verta A. Taylor. An Annotated Bibliography on Disaster and Disaster Planning, Ohio State University, Ohio: Disaster Research Center, April, 1980.
- Ralph, E.C. and S.B. Goodwillie. Annotated Bibliography on Snow and Ice Problems. Toronto, Canada: University of Toronto, 1968.
- Torres, Kathleen and Penny Waterstone. Information Services for Natural Hazards Research-Organizations, Periodicals, Newsletters, and References Sources. Boulder, Colorado: Natural Hazard Research and Applications Information Center, 1977.
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### CONFLAGRATION

- Fried, Emanuel. "Size-up - Evaluating the Fire Problem." Fire Chief, August 1973, p. 37.

Gratz, David B. "Strategic Planning - A Way to Maintain Control of Fires." Fire Engineering, September 1971, p. 92.

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"What's Your Apartment Fire Problem?" Fire Command, November 1975, p. 16.

#### CIVIL DISTURBANCE

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#### COMMUNICATIONS

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Drabek, K., Thomas E. and Jessica Edgerton. "CB Use in a Natural Disaster." APCO Bulletin, June 1979.

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Miles, William. "Development of Command Post to Handle Major Emergencies." Fire Engineering, September 1973, p. 109.

#### COORDINATION

Cavin, Dennis A. "Disaster Planning - Missouri Style." Fire Command, October 1979, p. 32.

Kerr, James W. "Civil Defense and the Fire Service." Firehouse Magazine Associates, March 1979, p. 39.

Sandman, Peter M. and Mary Paden. "At Three Mile Island." Columbia Journalism Review, July/August 1979, p. 43.

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#### EARTHQUAKE

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